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National Highway  
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**DYNAMIC SCIENCE, INC.**  
In-Depth Accident Investigation

Case Number: DSI-95-SP-013

, 1996

## Technical Report Documentation Page

1. Report No.  DS 9513	2. Government Accession No.	3. Recipient Catalog No.	
4. Title and Subtitle  In-Depth Accident Investigation		5. Report Date	
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16. Abstract  <p>This case was selected for investigation based on the fire involvement of the case vehicle and a possible defect that caused the fire. This two-vehicle collision occurred in 1995, a summer weekday, on a divided trafficway in New Jersey. The collision occurred when Vehicle 2, traveling southbound on a northbound roadway of a north/south trafficway, struck Vehicle 1 in a head-on configuration. Vehicle 1, a 1983 Dodge Ram van, was being driven northbound. There were six occupants in this vehicle. It was reported that the driver and the right front occupant was restrained by lap and shoulder restraints. Restraint usage for the other four occupants is unknown. Vehicle 1 was traveling at a speed estimated as between 81 and 97 KPH (50 and 60 MPH). Vehicle 2, a 1991 Toyota Celica, was being driven southbound on the northbound roadway. The driver of Vehicle 2 was not restrained by the available 3-point manual lap and shoulder restraint. Vehicle 2 was traveling at a speed estimated to have been between 81 and 97 KPH (50 and 60 MPH). This two-vehicle collision occurred when the driver of Vehicle 2 entered the northbound roadway of the north/south trafficway from an unknown exit ramp of the northbound roadway. Once the driver of Vehicle 2 entered the roadway he traveled southbound (the wrong direction). Vehicle 2 struck the front end of Vehicle 1 with its frontal plane. After the initial impact, Vehicle 1 rotated clockwise and the rear end of the vehicle went airborne as it rotated. Vehicle 1, as it was in the air and rotating, mounted the median barrier and slid along the top side of the barrier to its final rest position. During this sequence Vehicle 1 subsequently caught fire. Vehicle 2 was pushed rearward and counterclockwise to its final rest position. Vehicle 1's damage consisted of major frontal damage with the maximum crush of 123.0 cm (48.4 in) on the right front corner. This appears to have caused major intrusion into the occupant compartment, including the movement of the engine rearward and to the left. Police indicated that the fire probably started near the carburetor. It appeared that the gas line came off the carburetor during the movement of the engine. The interior inspection of Vehicle 1 conducted by DSI showed a heavier burn pattern present in the front portion of the vehicle. This burn pattern would support the information from the state police that the fire was started in the engine compartment.</p>			
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## TECHNICAL SUMMARY

CONTRACTOR: Dynamic Science, Inc.  
CASE NUMBER: DS95013

This case was selected for investigation based on the fire involvement of the case vehicle and a possible defect that caused the fire.

This two-vehicle collision occurred in . . . 1995, a summer weekday, on a divided trafficway in New Jersey. The collision occurred when Vehicle 2, traveling southbound on a northbound roadway of a north/south trafficway, struck Vehicle 1 in a head-on configuration.

Vehicle 1, a 1983 Dodge Ram van, was being driven northbound. There were six occupants in this vehicle. It was reported that the driver and the right front occupant was restrained by lap and shoulder restraints. Restraint usage for the other four occupants is unknown. Vehicle 1 was traveling at a speed estimated as between 81 and 97 KPH (50 and 60 MPH).

Vehicle 2, a 1991 Toyota Celica, was being driven southbound on the northbound roadway. The driver of Vehicle 2 was not restrained by the available 3-point manual lap and shoulder restraint. Vehicle 2 was traveling at a speed estimated to have been between 81 and 97 KPH (50 and 60 MPH).

This two-vehicle collision occurred when the driver of Vehicle 2 entered the northbound roadway of the north/south trafficway from an unknown exit ramp of the northbound roadway. Once the driver of Vehicle 2 entered the roadway he traveled southbound (the wrong direction). Vehicle 2 struck the front end of Vehicle 1 with its frontal plane.

The Delta V for Vehicle 1 was computed, using CRASH-3 PC, as 60 KPH (37 MPH). Vehicle 1 was assigned a CDC of 72FDEW7. The Delta V for Vehicle 2 was computed as 88 KPH (55 MPH). Vehicle 2 was assigned a CDC of 72FDEW4.

After the initial impact, Vehicle 1 rotated clockwise and the rear end of the vehicle went airborne as it rotated. Vehicle 1, as it was in the air and rotating, mounted the median barrier and slid along the top side of the barrier to its final rest position. During this sequence Vehicle 1 subsequently caught fire. Vehicle 2 was pushed rearward and counterclockwise to its final rest position.

Vehicle 1's damage consisted of major frontal damage with the maximum crush of 123.0 cm (48.4 in) on the right front corner. This appears to have caused major intrusion into the occupant compartment, including the movement of the engine rearward and to the left. Police indicated that the fire probably started near the carburetor. It appeared that the gas line came off the carburetor during the movement of the engine. The interior inspection of Vehicle 1 conducted by DSI. showed a heavier burn pattern present in the front portion of the vehicle. This burn pattern would support the information from the state police that the fire was started in the engine compartment (photographs 30-33).



The driver of Vehicle 1 sustained moderate injuries consisting of a closed head injury with positive loss of consciousness and smoke inhalation. The right front occupant sustained major injuries that later resulted in death. The injuries consisted of bilateral lower extremity third degree burns (about 10%), right buttock tissue avulsion, right femur fracture, left open tibia/fibula fractures, myocardial contusion and mild pulmonary inhalation injury. The driver and the right front occupant were rescued from the burning vehicle by a passing motorist, then were transported by ground ambulance to a trauma center. Further rescue attempts of the other four occupants were impossible due to the vehicle's being engulfed by flames. The driver of Vehicle 1 was the sole survivor in this vehicle. The right front occupant and four rear seated occupants of the vehicle reportedly sustained fatal injuries resulting from the fire in the vehicle and the impact with Vehicle 2.

The driver of Vehicle 2 sustained moderate injuries consisting of a loss of consciousness, subarachnoid hematoma, acetabular column fracture, abdominal contusion, and right knee abrasions, contusions and a laceration with the maximum AIS equal to AIS-3. The driver was transported to a trauma center where he was admitted for treatment.

Vehicles 1 and 2 were towed from the collision scene due to the damage sustained from this collision.

*This research was supported by the National Highway Traffic Safety Administration (NHTSA), U.S. Department of Transportation. The opinions, findings, and recommendations contained herein are those of the authors, and do not necessarily represent those of NHTSA.*

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*The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.*

*Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.*

**DYNAMIC SCIENCE, INC.**  
**ACCIDENT INVESTIGATION**  
**CASE NUMBER: DS95013**

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- A. Police Accident Report
- B. Photo Copies of Collision Scene
- C. Photos

**Case Number: DS95013**

**ACCIDENT DATA:**

**Location:** New Jersey  
**Area/Type:** Urban  
**Date/Time:** Summer / Weekday  
**Accident Type:** Car/Van - Head-on

**INJURY SEVERITY:**

**Vehicle 1:** Driver, AIS-3  
R/F Occupant, AIS-4, later reportedly expired  
Four other occupants in the rear portion of the vehicle, unknown seat positions, reportedly sustained fatal injuries

**Vehicle 2:** Driver, AIS-3

**AMBIENCE:**

**Viewing Conditions:** No viewing restriction  
**Cloud Cover:** Clear  
**Precipitation:** None  
**Road Surface:** Dry

**ROADWAY:**

	<b>VEHICLE 1</b>	<b>VEHICLE 2</b>
<b>Type:</b>	Divided trafficway, 5-lane northbound	Divided trafficway, 5-lane northbound (traveling southbound)
<b>Width:</b>	15.2 m (50.0 ft)	15.2 m (50.0 ft)
<b>Traffic Density:</b>	Light	Light
<b>Median:</b>	Concrete	Concrete
<b>Edge:</b>	Asphalt shoulder	Asphalt shoulder
<b>Surface:</b>	Asphalt	Asphalt
<b>Reported Defects:</b>	None	None
<b>Co-efficient of Friction (est.):</b>	.70 dry	.70 dry
<b>Vertical Alignment:</b>	Up grade	Down grade
<b>Horizontal Alignment:</b>	Straight	Straight

**TRAFFIC CONTROLS:**

	<b>VEHICLE 1</b>	<b>VEHICLE 2</b>
<b>Signals:</b>	None	None
<b>Signs:</b>	None	Do Not Enter sign wherever Vehicle 1 entered the northbound roadway
<b>Speed Limit:</b>	89 KPH (55 MPH)	89 KPH (55 MPH)
<b>Markings:</b>	Standard lane markings	Standard lane markings

**VEHICLES:**

	<b>VEHICLE 1</b>	<b>VEHICLE 2</b>
<b>Description:</b>	1983 Dodge Ram van	1991 Toyota Celica
<b>Odometer:</b>	Unknown, unable to read due to the fire in the vehicle	Unknown, unable to read due to the damage
<b>Engine:</b>	5.2 L / V8	2.2 L / L4
<b>Vehicle Modifications:</b>	None known	None
<b>Tire Condition:</b>	Good tread depth	Good tread depth
<b>Manual Restraints:</b>	Unable to inspect, fire in vehicle	3-point lap and shoulder restraints at the front seating positions, left and right rear seating positions; 2-point lap restraints at the rear center seating position.
<b>Automatic Restraints:</b>	None	Supplemental Restraint System (driver's side air bag)
<b>Reported Defects:</b>	None	None
<b>Cargo:</b>	Unknown, fire in vehicle	None
<b>Windshield Damage:</b>	Unknown, fire in vehicle	Cracked by impact forces and occupant contact
<b>Fleet:</b>	None	None
<b>Tow Status:</b>	Towed due to damage	Towed due to damage

**VEHICLE DAMAGE:**

	<b>VEHICLE 1</b>	<b>VEHICLE 2</b>
<b>Object Struck:</b>	Vehicle 2	Vehicle 1
<b>Event Number:</b>	01	01
<b>CDC:</b>	72FDEW7	72FDEW4
<b>Maximum Crush:</b>	123.0 cm (48.4 in) @ C <sub>6</sub>	105.5 cm (41.5 in) @ C <sub>6</sub>

**VEHICLE VELOCITY ESTIMATES:**

	<b>VEHICLE 1</b>	<b>VEHICLE 2</b>
<b>Impact Speed:</b>	81 - 97 KPH (50 - 60 MPH)	81 - 97 KPH (50 - 60 MPH)
<b>Total Delta V:</b>	60 KPH (37 MPH)	88 KPH (55 MPH)
<b>Longitudinal Delta V:</b>	-59 KPH (-37 MPH)	-87 KPH (-54 MPH)
<b>Lateral Delta V:</b>	-10 KPH (-6 MPH)	-15 KPH (-10 MPH)
<b>Energy Dissipation:</b>	474,621.4 joules (350,015.8 ft-lbs)	228,6616.2 joules (168,596.0 ft-lbs)

**Calculations based upon:** CRASH-3 PC

**Case Number: DSI-95-SP-013**

**VEHICLE DAMAGE:**

	<b>VEHICLE 1</b>	<b>VEHICLE 1</b>
<b>Object Struck:</b>	Fire	Median Barrier
<b>Event Number:</b>	03	02
<b>CDC:</b>	N/A	09LPLW1
<b>Maximum Crush:</b>		Zone 1

**VEHICLE VELOCITY ESTIMATES:**

	<b>VEHICLE 1</b>	<b>VEHICLE 1</b>
<b>Impact Speed:</b>	N/A	40 - 48 KPH (25 - 30 MPH)
<b>Total Delta V:</b>	Not computed, fire in vehicle	No Computed, insufficient data
<b>Longitudinal Delta V:</b>		
<b>Lateral Delta V:</b>		
<b>Energy Dissipation:</b>		



**COLLISION SEQUENCE:**

**PRE-CRASH:**

This two-vehicle collision occurred on a summer weekday, on a northbound roadway of a north/south divided trafficway in New Jersey. There is a posted speed limit of 89 kilometers per hour (55 MPH). The collision occurred when Vehicle 2 was traveling southbound (the wrong direction) on the northbound roadway. Vehicle 2 struck Vehicle 1 in a head-on configuration.

Vehicle 1, a 1983 Dodge Ram van, was being driven northbound on the north/south trafficway. The driver was a 59 year old male. In the right front seating position was a 54 year old female. It was reported that the driver and the right front occupant were restrained by lap and shoulder restraints. In the vehicle's rear seating positions, unknown locations, were a 72 year old female, an 80 year old female, a 69 year old female and a 62 year old female. It is unknown if any of the rear occupants were restrained by the available restraint systems in the vehicle. Vehicle 1 was traveling at a speed estimated to have been between 81 and 97 kilometers per hour (50 and 60 MPH).

Vehicle 2, a 1991 Toyota Celica, was being driven southbound by a 24 year old male driver on the northbound roadway. The driver was not restrained by the available 3-point manual lap and shoulder restraint, however, the vehicle had a supplemental restraint system (air bag) that deployed during impact. Vehicle 2 was traveling at a speed estimated to have been between 81 and 97 kilometers per hour (50 and 60 MPH).

This two-vehicle collision occurred when the driver of Vehicle 2 entered the northbound roadway of the north/south trafficway from an unknown exit ramp of the northbound roadway. Once the driver entered the roadway he traveled southbound, the wrong direction on a one-way roadway. Vehicle 2 struck the front end of Vehicle 1 with its frontal plane.

**CRASH:**

The Delta V for Vehicle 1 was computed, using CRASH-3 PC, as 60 kilometers per hour (37 MPH). Vehicle 1 was assigned a Collision Deformation Classification (CDC) of 72FDEW7 and a Principle Direction of Force (PDOF) of 010 degrees. The combined direct and induced damage width was 130.0 centimeters (51.2 in) [CRASH "L" = 187.0 cm (73.6 in)], and the maximum crush depth was 123.0 centimeters (48.4 in) located at C<sub>6</sub>.

The Delta V for Vehicle 2 was computed as 88 kilometers per hour (55 MPH). Vehicle 2 was assigned a CDC of 72FDEW4 and a PDOF of 010 degrees. The combined direct and

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The Delta V for Vehicle 2 was computed as 88 kilometers per hour (55 MPH). Vehicle 2 was assigned a CDC of 72FDEW4 and a PDOF of 010 degrees. The combined direct and induced damage width was 73.0 centimeters (28.7 in) [CRASH "L" = 140.0 cm (55.1 in)] , and the maximum crush depth was 105.5 centimeters (41.5 in) located at C<sub>6</sub>.

**POST CRASH:**

After the impact, Vehicle 1 rotated clockwise and the rear end of the vehicle went airborne. Vehicle 1, as it was in the air, mounted the median barrier and slid along the top side of the barrier to its final rest position, facing southeast. During this time frame it appears Vehicle 1 caught fire. Vehicle 2 was pushed rearward and counterclockwise to its final rest position, facing southeast.

**SUPPLEMENTAL RESTRAINT SYSTEM:**

Vehicle 2 was equipped with a Supplemental Restraint System (driver's side air bag). The air bag deployed during the collision with Vehicle 1. The longitudinal component of the Delta V for the air bag deployment impact was a minus 87 kilometers per hour (54 MPH).

**SCENE CLEARANCE:**

The driver and right front occupant of Vehicle 1 were reportedly pulled out of the vehicle by a passing motorist. Further rescue attempts of the other four occupants were impossible due to the vehicle's being engulfed by flames. The driver and right front occupant were transported by ground ambulance to a trauma center for treatment. The other four occupants of Vehicle 1 were fatally injured.

The driver of Vehicle 2 reportedly sustained incapacitating injuries in the collision. On arrival at the scene, a police officer removed the driver from his vehicle, because of fuel spilling under the vehicle and the close proximity of Vehicle 1 that was on fire. He was transported by ground ambulance to a trauma center for treatment.

Vehicles 1 and 2 were towed from the collision scene due to the damage sustained from this collision.

**SAFETY STANDARDS:**

No violations of the Federal Motor Vehicle Safety Standards were found during vehicle inspections.

**DRIVER AND OTHER OCCUPANTS:**

**VEHICLE 1**

	<b>DRIVER</b>	<b>OCCUPANT 2</b>
<b>Age/Sex:</b>	59 Yrs. / Male	54 Yrs / Female
<b>Seated Position:</b>	Left Front	Right front
<b>Seat Type:</b>	Bucket Seat / box mounted, (van)	Bucket Seat / box mounted (van)
<b>Height:</b>	Unknown	Unknown
<b>Weight:</b>	Unknown	Unknown
<b>Pre-existing Medical Condition:</b>	None	None
<b>Body Posture:</b>	Upright seated position	Upright seated position
<b>Hand Position:</b>	On Steering Wheel, Unknown location	Unknown
<b>Foot Position:</b>	Unknown	Unknown
<b>Restraint Usage:</b>	Reportedly wearing a manual 3-point lap and shoulder restraint	Reportedly wearing a manual 3-point lap and shoulder restraint
<b>Additional Occupants:</b>	Five	N/A

**DRIVER AND OTHER OCCUPANTS (Con't):**

**VEHICLE 1**

	<b>OCCUPANT 3</b>	<b>OCCUPANT 4</b>
<b>Age/Sex:</b>	72 Yrs. / Female	80 Yrs / Female
<b>Seated Position:</b>	Rear seating position, unknown location	Rear seating position, unknown location
<b>Seat Type:</b>	Unknown	Unknown
<b>Height:</b>	Unknown	Unknown
<b>Weight:</b>	Unknown	Unknown
<b>Pre-existing Medical Condition:</b>	None	None
<b>Body Posture:</b>	Unknown	Unknown
<b>Hand Position:</b>	Unknown	Unknown
<b>Foot Position:</b>	Unknown	Unknown
<b>Restraint Usage:</b>	Unknown	Unknown
<b>Additional Occupants:</b>	N/A	N/A

**DRIVER AND OTHER OCCUPANTS (Con't):**

**VEHICLE 1**

	<b>OCCUPANT 5</b>	<b>OCCUPANT 6</b>
<b>Age/Sex:</b>	69 Yrs. / Female	62 Yrs. / Female
<b>Seated Position:</b>	Rear seating position, unknown location	Rear seating position, unknown location
<b>Seat Type:</b>	Unknown	Unknown
<b>Height:</b>	Unknown	Unknown
<b>Weight:</b>	Unknown	Unknown
<b>Pre-existing Medical Condition:</b>	Unknown	Unknown
<b>Alcohol/Drug Involvement:</b>	None	None
<b>Body Posture:</b>	Unknown	Unknown
<b>Hand Position:</b>	Unknown	Unknown
<b>Foot Position:</b>	Unknown	Unknown
<b>Restraint Usage:</b>	Unknown	Unknown
<b>Additional Occupants:</b>	N/A	N/A

**DRIVER AND OTHER OCCUPANTS (Con't):**

**VEHICLE 2**

**DRIVER**

<b>Age/Sex:</b>	24 Yrs. / Male
<b>Seated Position:</b>	Left Front
<b>Seat Type:</b>	Bucket Seat
<b>Height:</b>	Unknown
<b>Weight:</b>	Unknown
<b>Pre-existing Medical Condition:</b>	None
<b>Alcohol/Drug Involvement:</b>	None
<b>Driving Experience:</b>	8 years
<b>Body Posture:</b>	Upright seated position
<b>Hand Position:</b>	Steering wheel, unknown location
<b>Foot Position:</b>	Unknown
<b>Restraint Usage:</b>	A supplemental restraint system (air bag)
<b>Additional Occupants:</b>	None

**INJURIES:**

**Vehicle 1**

	<b>INJURY</b>	<b>AIS/OIC Code</b>	<b>ICD-9</b>	<b>Source</b>	<b>Confidence Level</b>
<b>DRIVER</b>	Closed head injury w/ positive loss of consciousness	160802.3,0	850.5	Unknown	Unknown
	Smoke inhalation	919202.3,0	986	Fire in vehicle	Certain
<b>R/F OCCUPANT</b>	Bilateral lower extremity third degree burns (about 10%)	892012.2,3	948.1	Fire in vehicle	Certain
	Right buttock tissue avulsion	590800.1,1	877.0	Unknown	Unknown
	Right femur fracture	851800.3,1	820.8	Instrument panel	Probable
	Left open tibia fracture	853404.3,2	823.82	Toe pan	Probable
	Left open fibula fracture	851605.3,2	823.82	Toe pan	Probable
	Myocardial contusion	441002.3,4	861.01	Unknown	Unknown
	Mild Pulmonary inhalation injury	919203.3,0	986	Fire in vehicle	Certain
<b>Four Rear Seat Occupants</b>	Fatal injuries, due to impact and fire in vehicle				

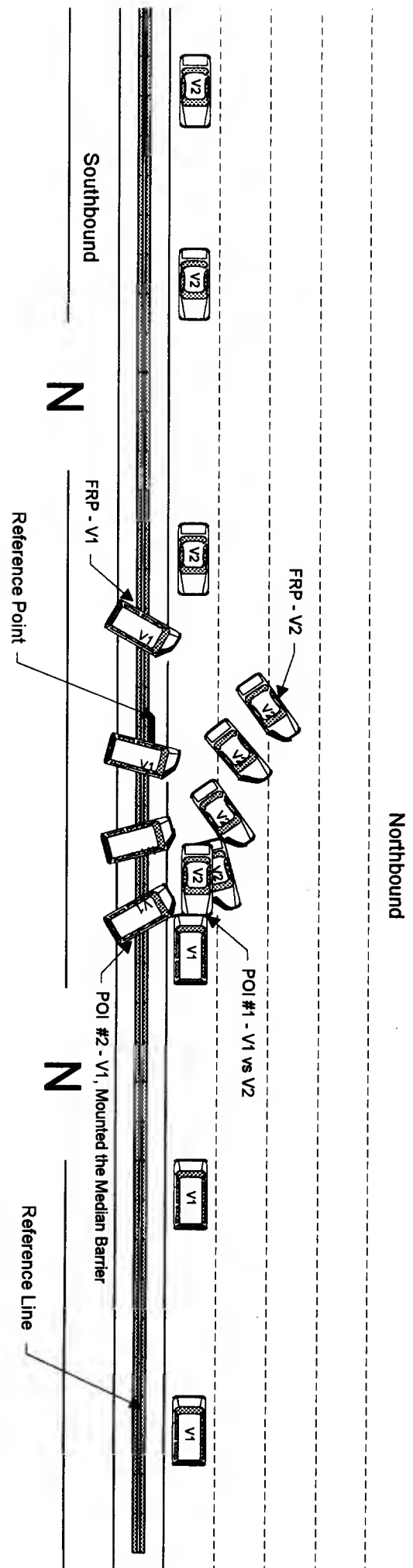
**INJURIES (Con't):****Vehicle 2**

	<b>INJURY</b>	<b>AIS/OIC CODE</b>	<b>ICD-9</b>	<b>SOURCE</b>	<b>Confidence Level</b>
<b>DRIVER</b>	Loss of consciousness < 1 hour	160202.2,0	850.1	Windshield	Certain
	Right occipital subarachnoid hematoma	140684.3,1	852.0	Windshield	Certain
	Left upper abdominal quadrant contusion	590402.1,2	922.2	Air bag	Certain
	Right knee abrasions	890202.1,1	916.0	Center instrument panel	Certain
	Right knee contusions	890402.1,1	924.11	Center instrument panel	Certain
	Right knee laceration	890602.1,1	891.0	Center instrument panel	Certain
	Right posterior acetabular column fracture (multiple bone fragments)	852602.2,1	808.0	Center console area	Certain



## **List of Abbreviations**

FT	Feet
IN	Inches
AME	After Market Equipment
AIS	Abbreviated Injury Scale
CCW	Counterclockwise
CDC	Collision Deformation Classification
C/F	Center Front
CG	Center of Gravity
CM	Centimeter
C/R	Center Rear
CW	Clockwise
E, EB	East, Eastbound
FRP	Final Rest Position
KG	Kilogram
KM/H	Kilometers per Hour
L/F	Left Front
L/R	Left Rear
M	Meter
N, NB	North, Northbound
NE	Northeast
NW	Northwest
OEM	Original Equipment Manufacture
PDOF	Principal Direction Of Force
POI	Point of Impact
R	Radius of Curvature
R/F	Right Front
RL	Reference Line
RP	Reference Point
R/R	Right Rear
S, SB	South, Southbound
SE	Southeast
SW	Southwest
V1	Vehicle 1
W, WB	West, Westbound



## COLLISION MEASUREMENTS

**Case Number: DSI-95-SP-013**

Reference Point: North end of storm drain, located near the median barrier

Reference Line: East side of the median barrier

DATA POINT	LONGITUDINALS	LATERALS
Yellow solid line	0	E 1.0 m (3.3 ft)
1st white broken line	0	E 4.1 m (13.3 ft)
2nd white broken line	0	E 7.1 m (23.3 ft)
3rd white broken line	0	E 10.1 m (33.3 ft)
4th white broken line	0	E 13.5 m (43.3 ft)
White solid line (right edge line)	0	E 16.2 m (53.3 ft)
POI #1 (V1 vs. V2)	S 12.1 m (39.8 ft)	E 2.5 m (8.3 ft)
POI #2 (V1 vs. median barrier) approx.	S 11.0 m (36.0 ft)	0
<b>Vehicle 2 Final Rest Position (FRP)</b>		
Right front wheel	S 0.6 m (2.0 ft)	E 7.1 m (23.3 ft)
Right rear wheel	N 0.9 m (2.8 ft)	E 5.9 m (19.2 ft)
<b>Vehicle 1 Final Rest Position (FRP)</b>		
Right front wheel	N 4.1 m (13.5 ft)	0
Left front wheel	N 4.8 m (15.6 ft)	E 1.5 m (5.0 ft)

CASE NUMBER DS9513

# MISSING DATA

THE FOLLOWING DATA ARE NOT INCLUDED IN THIS CASE:

PAGE NUMBER(S)

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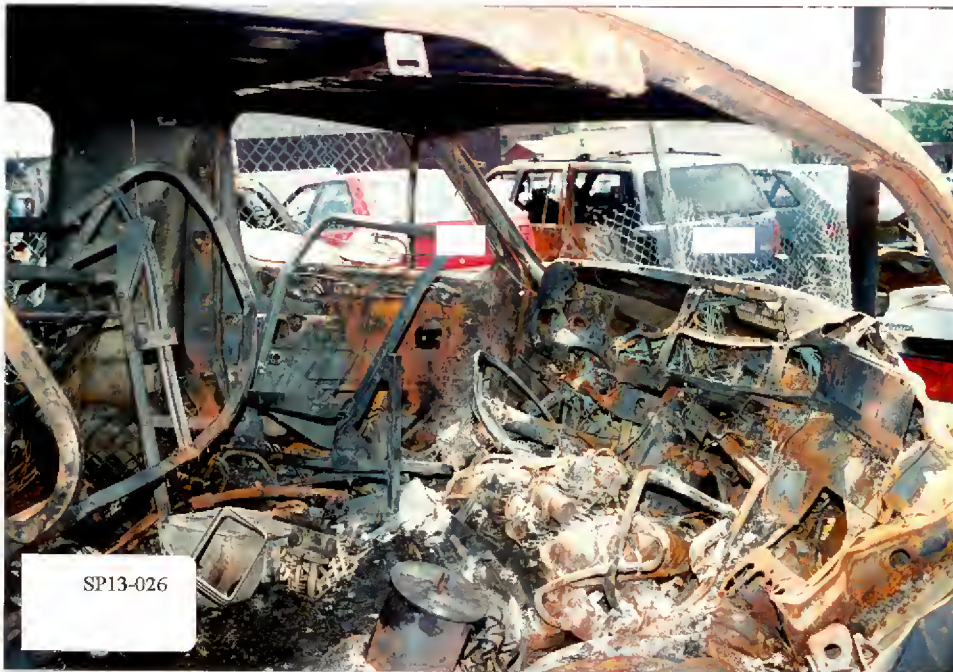


















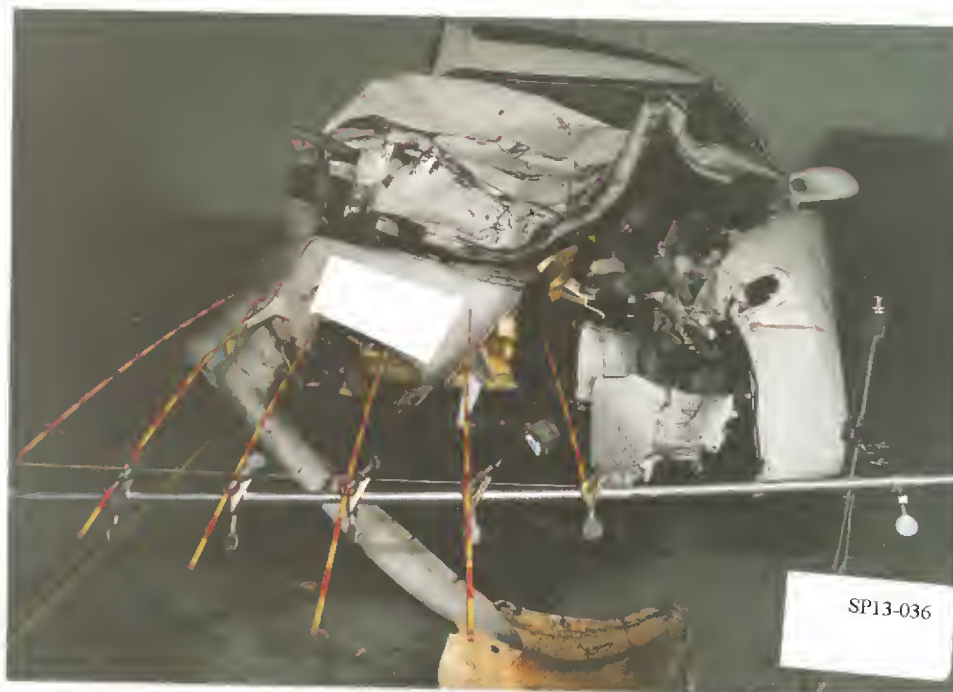




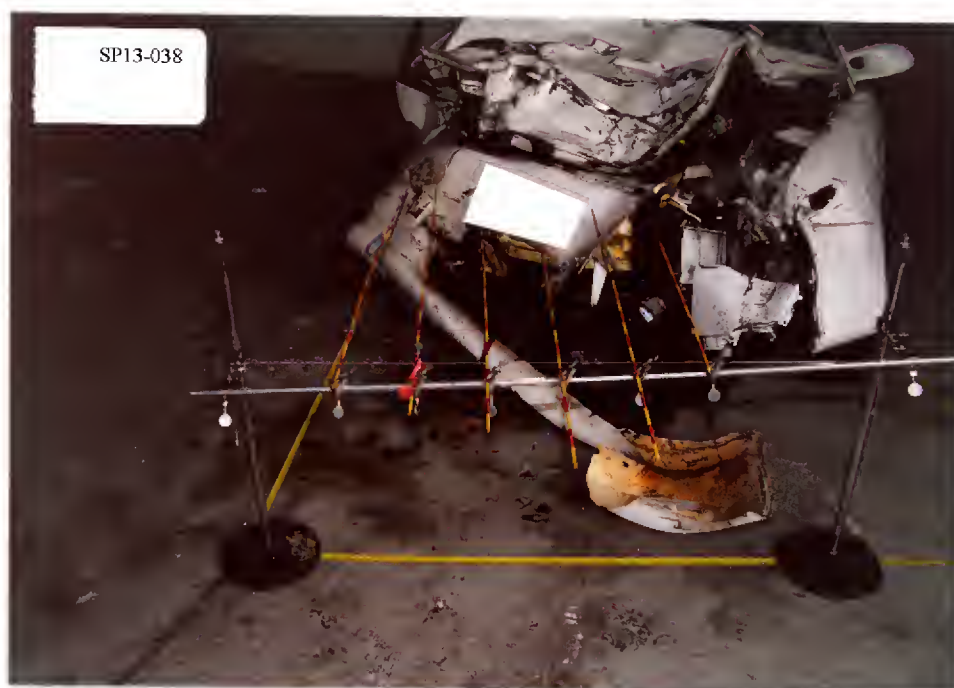


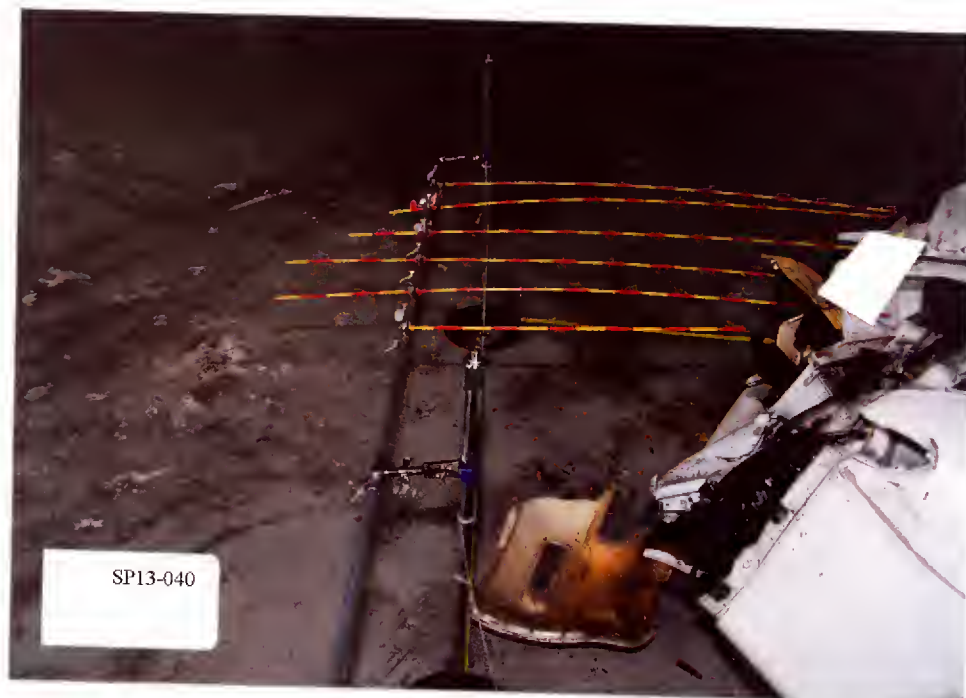
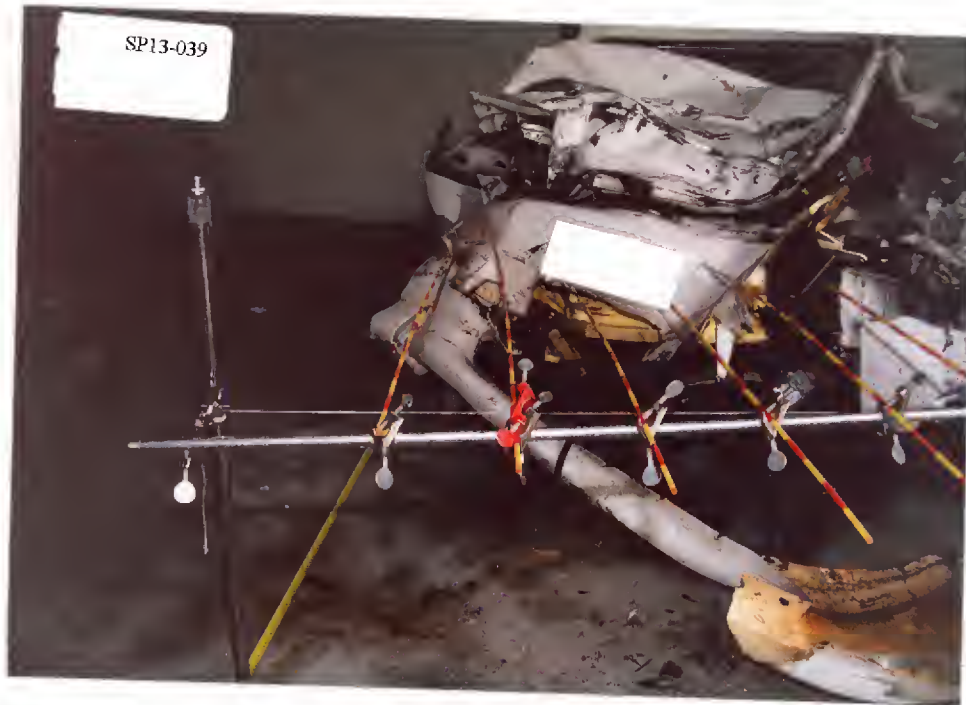




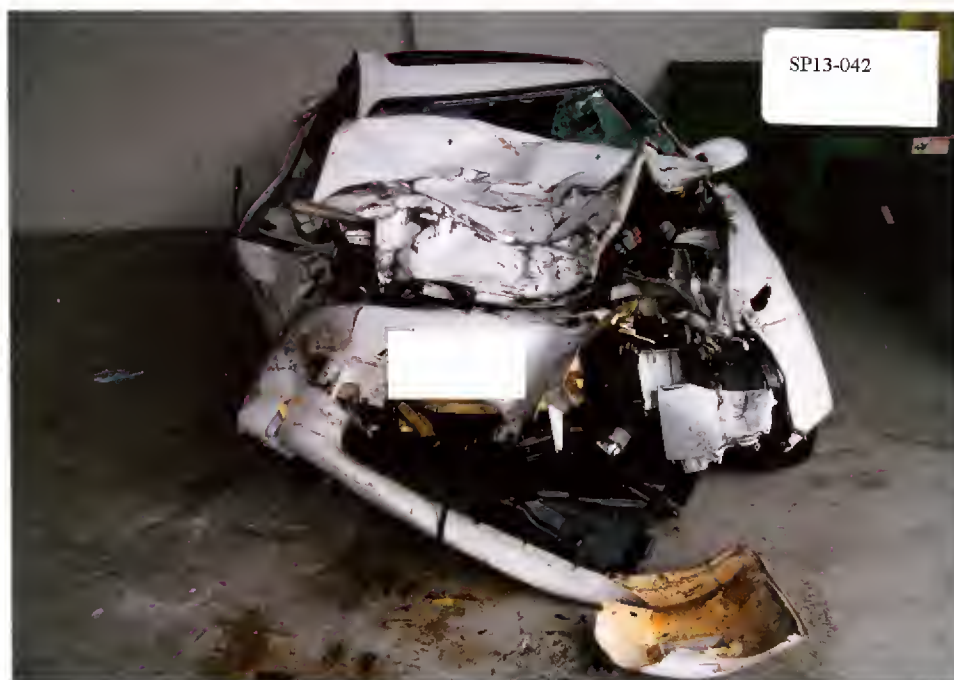
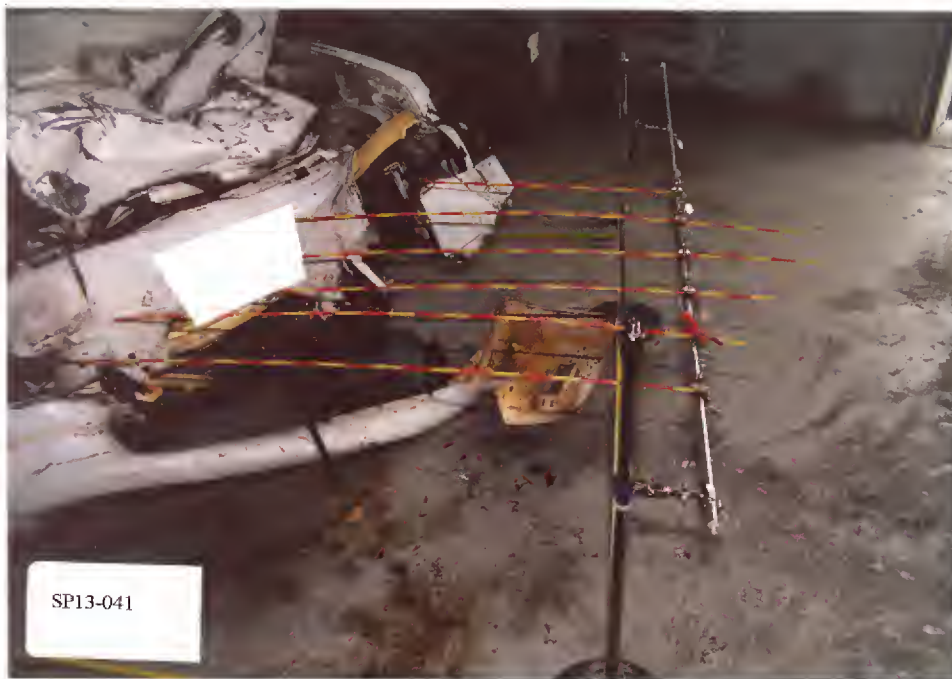


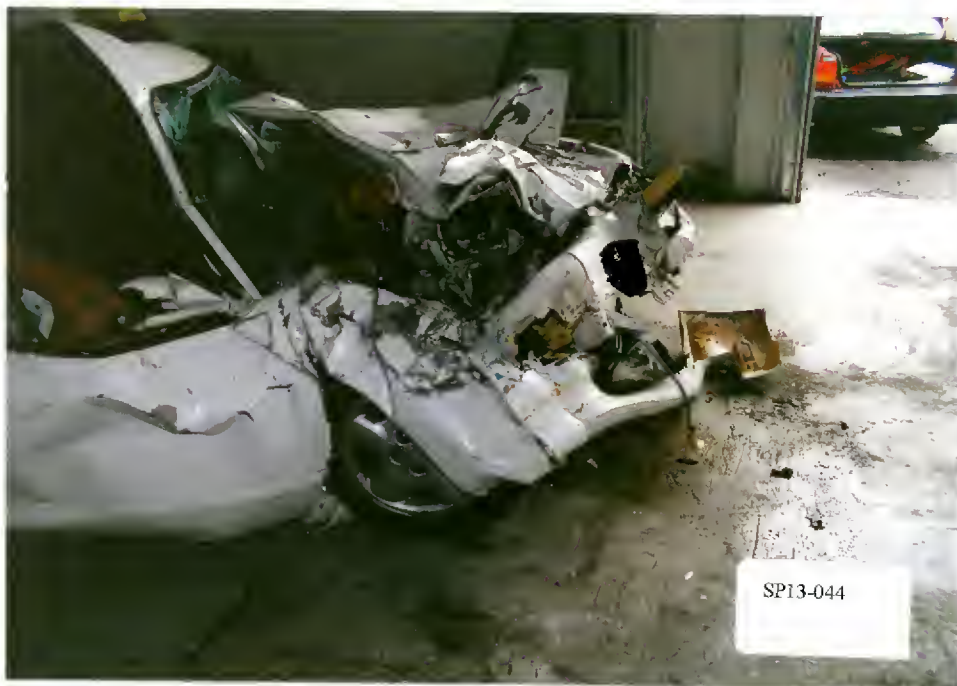
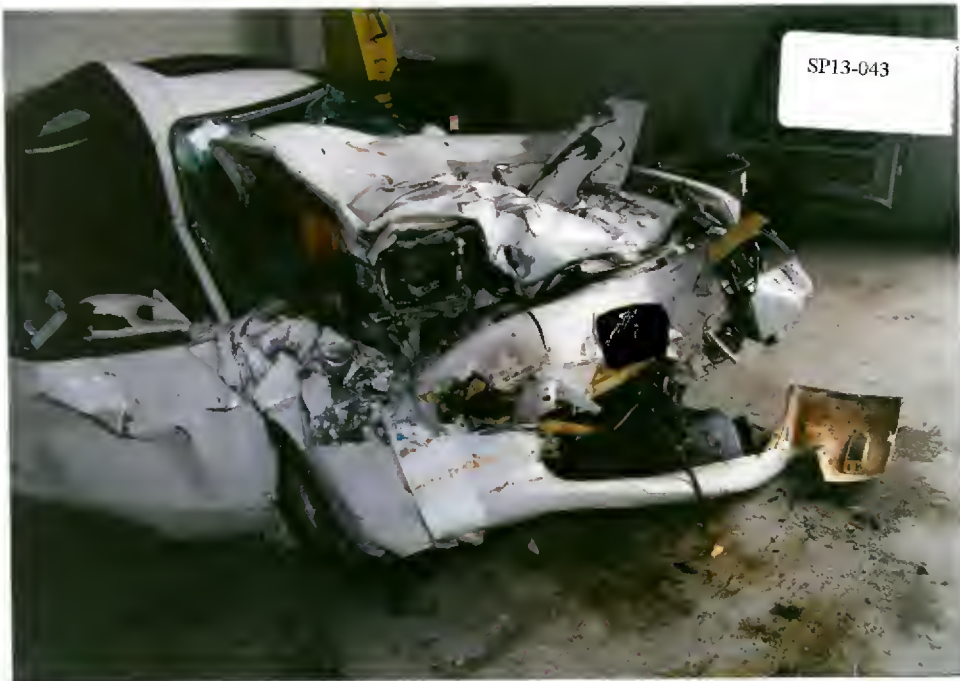










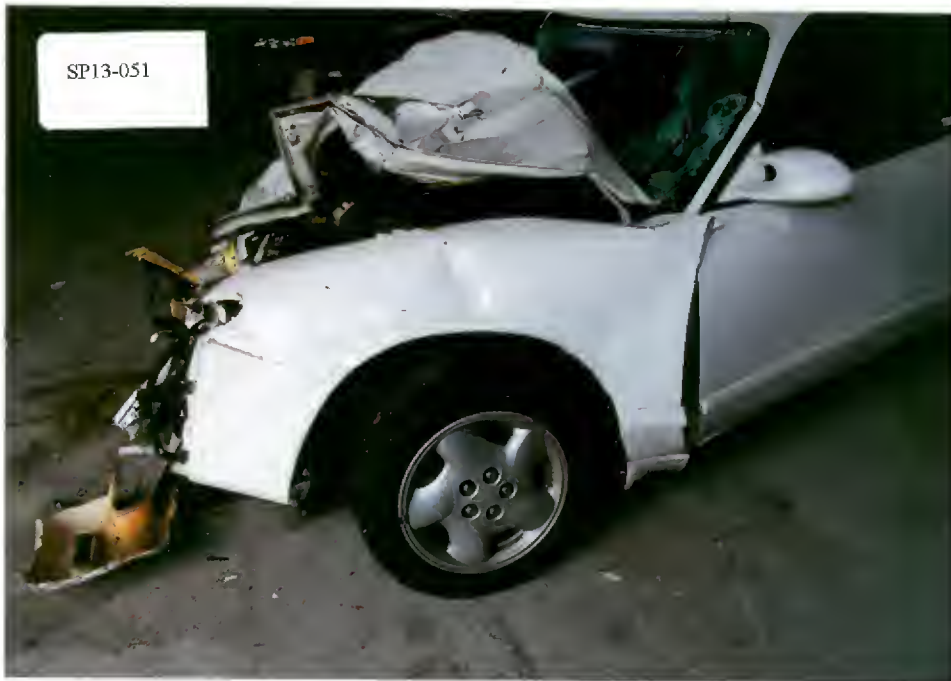


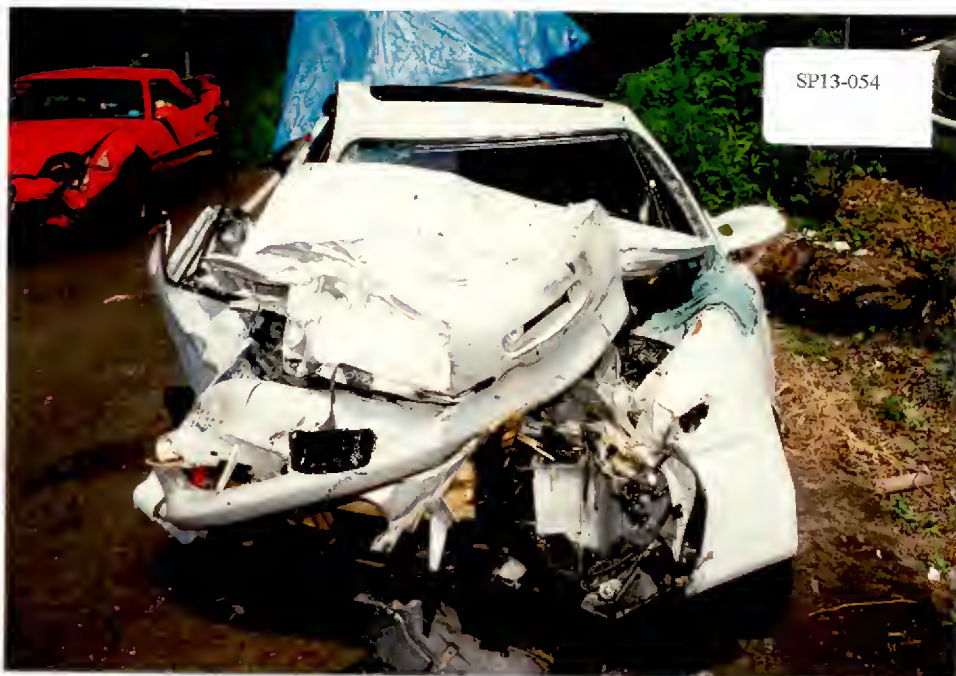




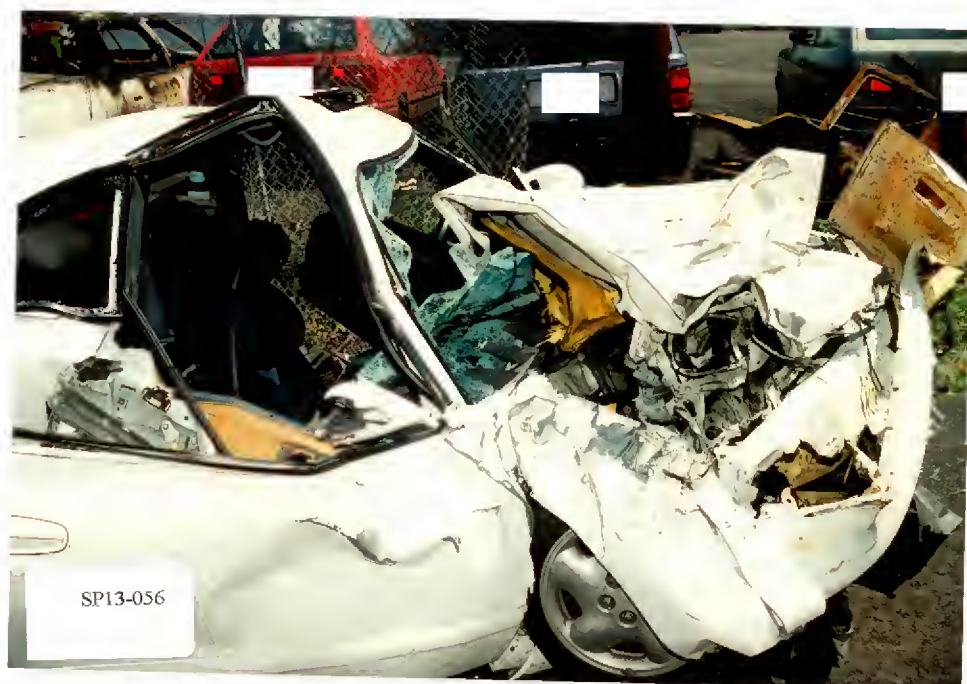




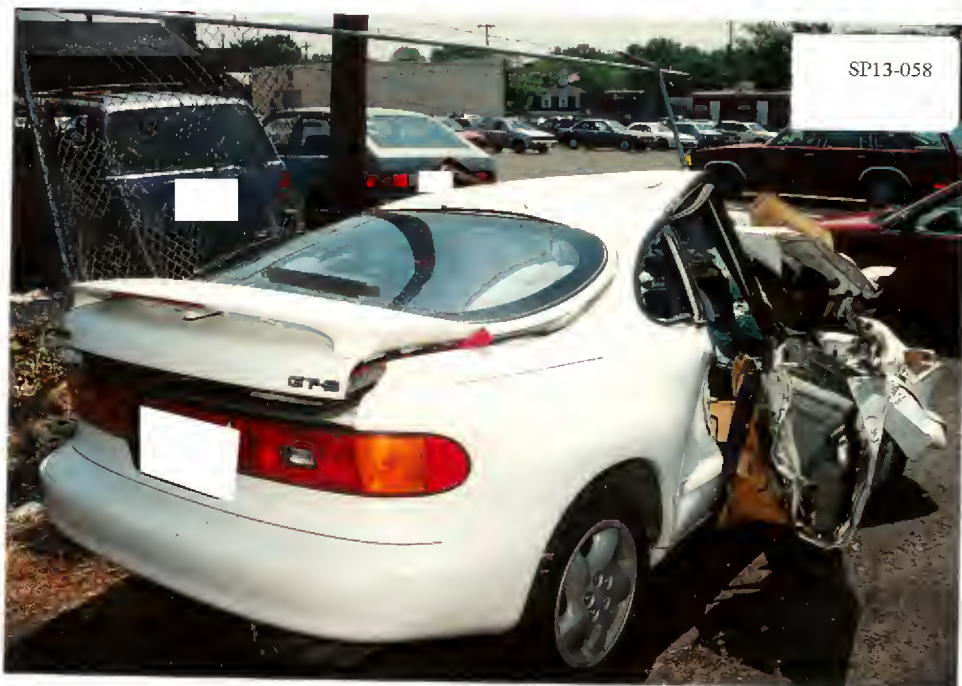
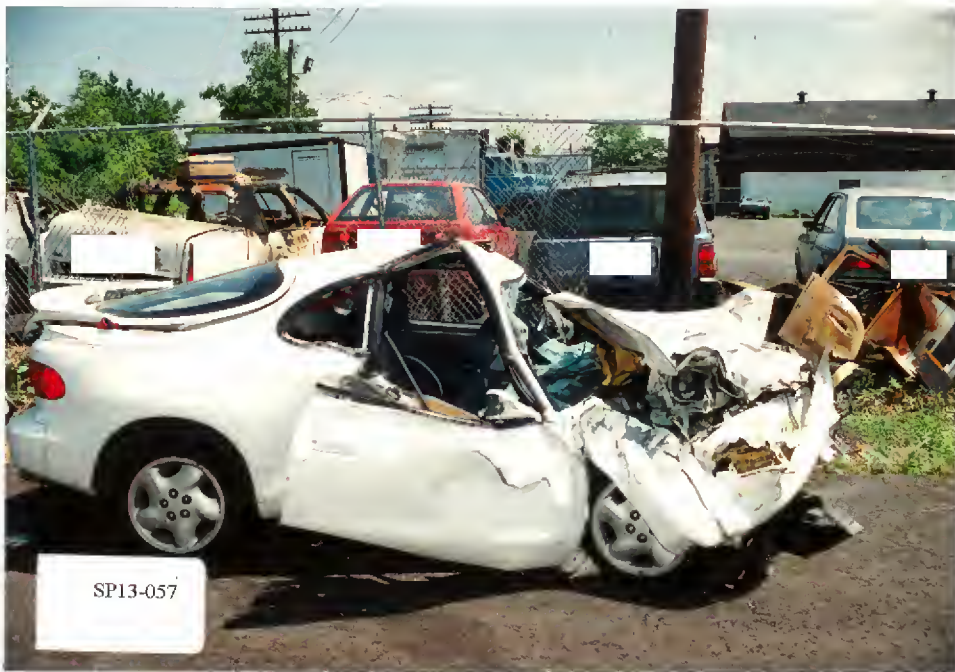


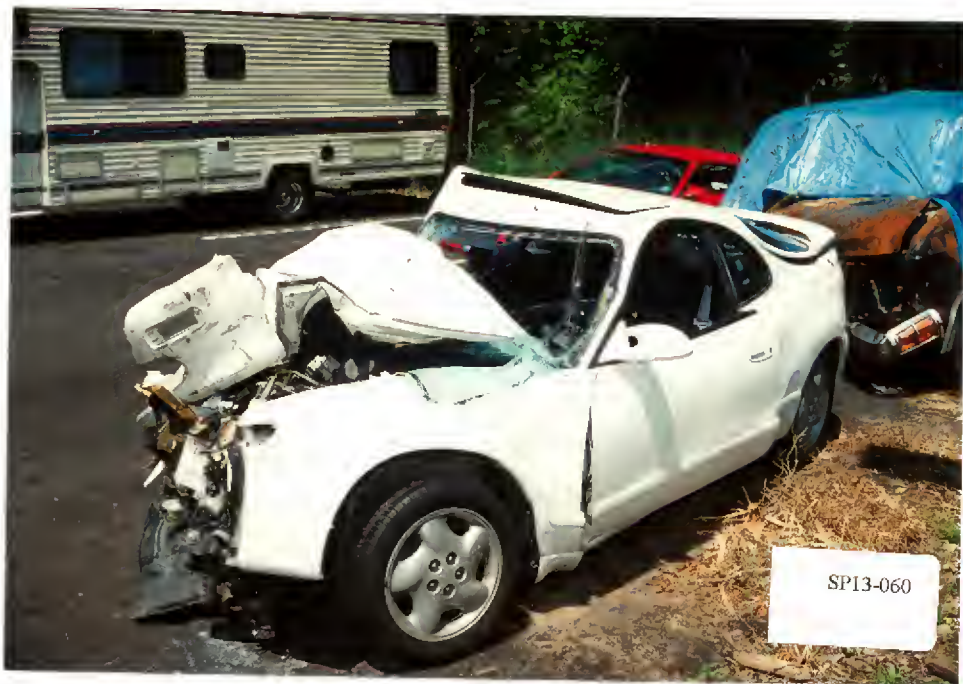
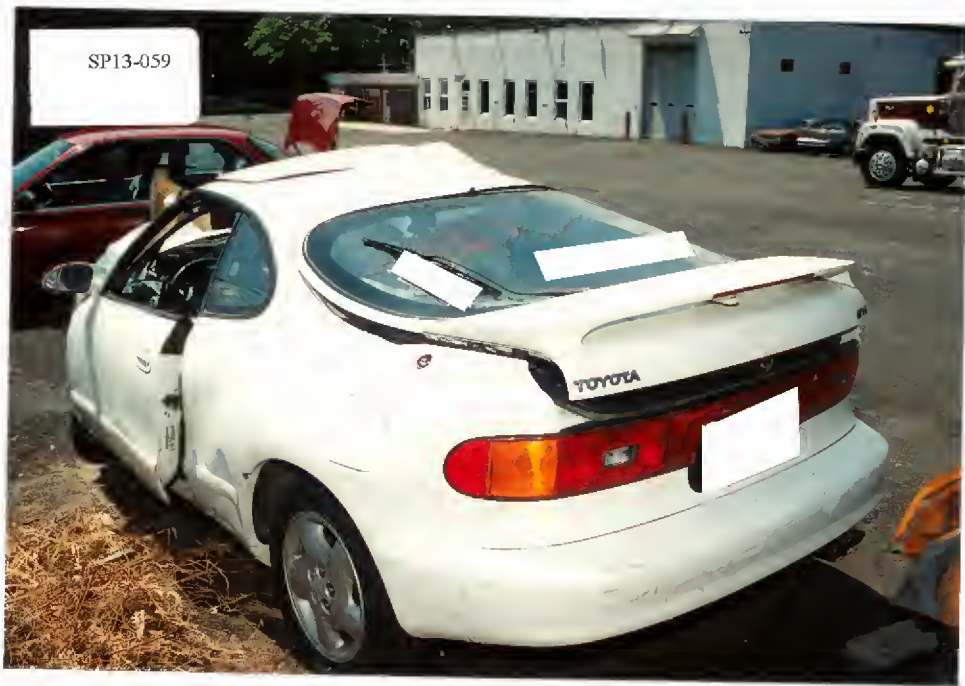




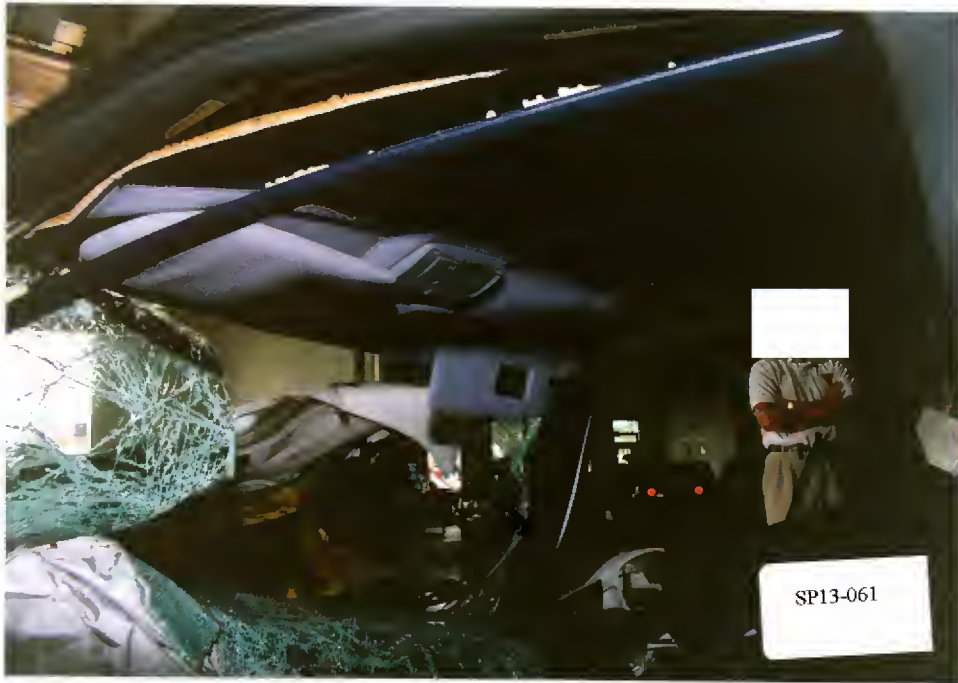


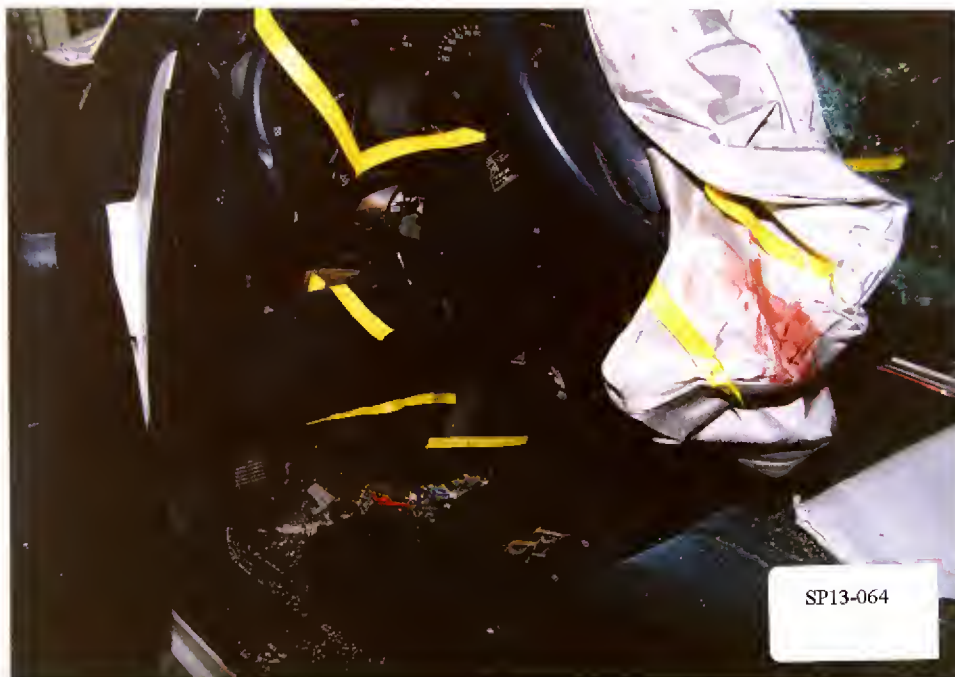














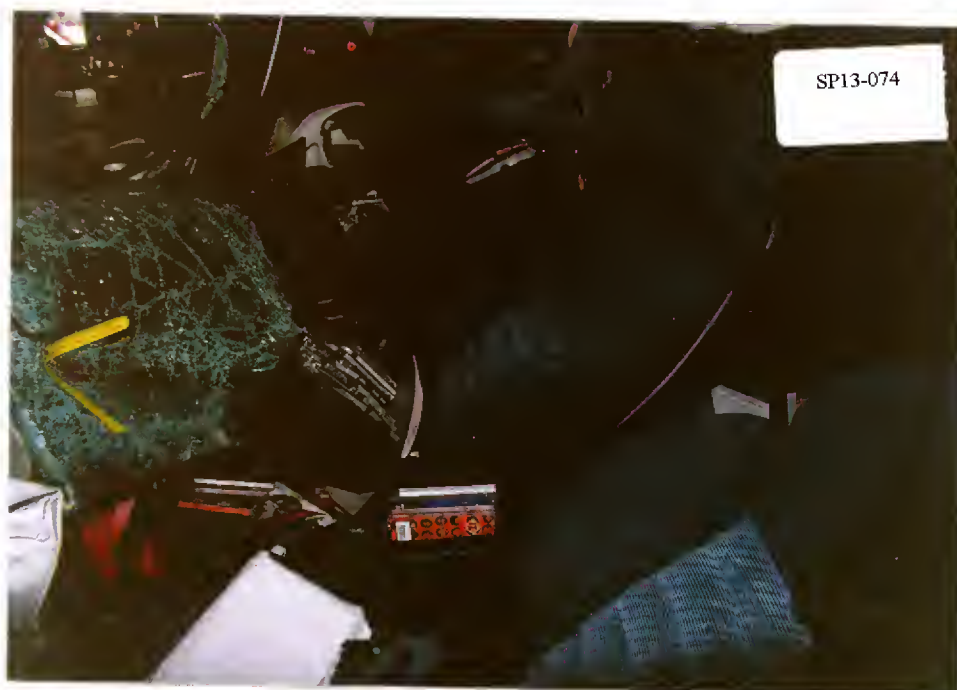


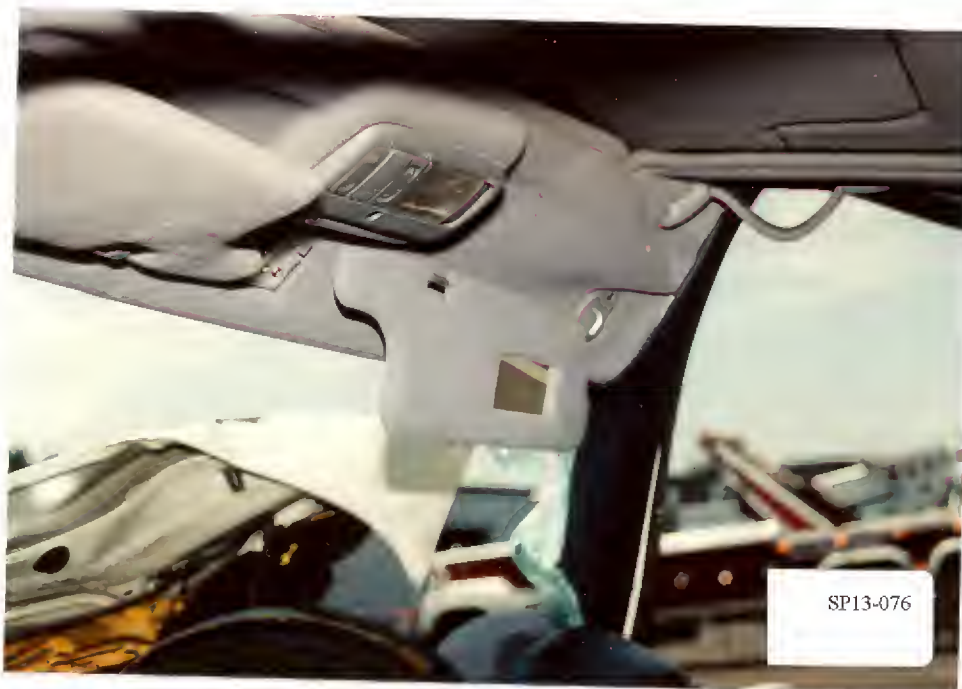






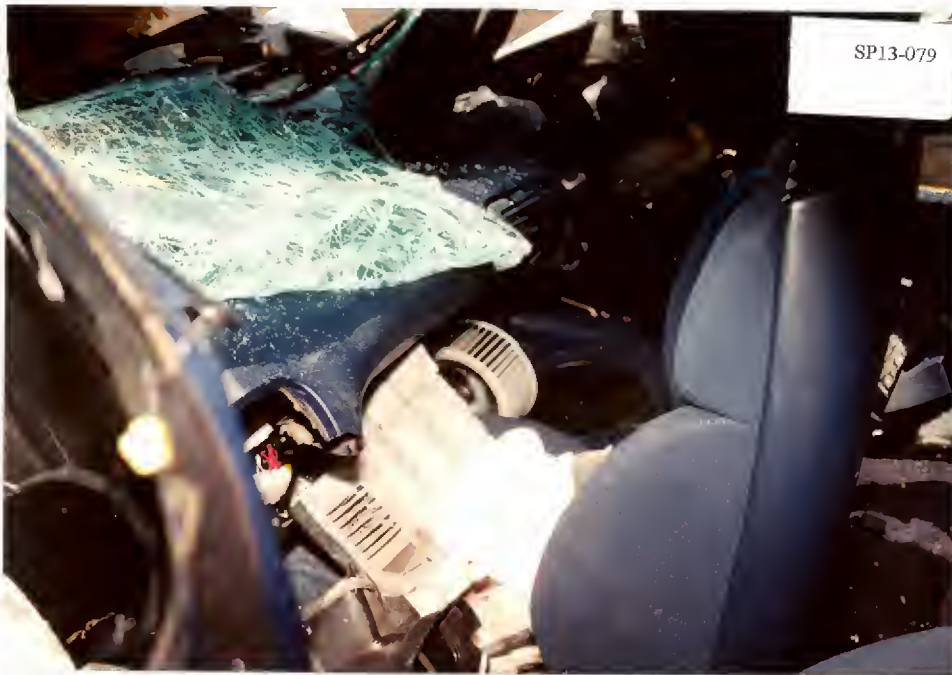






















# INITIAL ACCIDENT INVESTIGATION REPORT

Station \_\_\_\_\_

Case No. \_\_\_\_\_

14	15	16	17	18	19	20	21	22	23	24	NAMES- ADDRESSES OF OCCUPANTS-IF DECEASED- DATE&TIME OF DEATH
0.1	7	4	1	6.9	F	1.2	6	1	SEE NARRATIVE		
0.1	7	4	1	6.2	F	1.2	6	1	SEE NARRATIVE		
0.2	1	1	1	2.4	M	0.9	7	2			

123 Show NORTH  
by arrow

SEE ATTACHED DIAGRAMS

## 124 Accident Description

DRIVER #1 STATED: HE WAS TRAVELLING NORTH BOUND IN THE LEFT LANE COMING FROM ENROUTE TO WHEN HE SAW A VEHICLE COMING AT HIM HEAD ON IN THE LEFT LANE. HE HAD NO WHERE TO GO AND THAT WAS ALL HE COULD REMEMBER.

DRIVER #2: REFUSED TO GIVE A STATEMENT.

INVESTIGATION AT THE SCENE REVEALED: VEH. 1 WAS TRAVELLING NORTHBOUND IN THE LEFT LANE OF THE WHEN IT WAS STRUCK HEAD ON IN THE LL BY VEH. 2 TRAVELLING SOUTHBOUND IN THE SAME LANE. AFTER INITIAL IMPACT VEH. 1 SPIN CLOCKWISE AND WAS SENT AIRBORNE, STRUCK THE CENTER CONCRETE BARRIER WITH THE REAR DRIVER SIDE AND CAME TO A FINAL RESTING POSITION ON TOP OF IT FACING SOUTHEAST. VEH. 2 REBOUNDED REARWARD COMING TO A REST ACROSS THE 2ND AND 3RD LANE ALSO FACING SOUTHEAST.

AT SOME POINT AFTER INITIAL IMPACT, VEH. 1 BURST INTO FLAMES. A PASSING MOTORIST, IDENTIFIED AS \_\_\_\_\_ RESCUED THE DRIVER AND RF PASSENGER FROM VEH. 1. FURTHER RESCUE ATTEMPTS OF THE REMAINING FOUR PASSENGERS IN VEH. 1 WERE IMPOSSIBLE DUE TO IT BEING FULLY ENGULFED BY FLAMES.

UPON MY ARRIVAL AT THE SCENE, OFFICERS \_\_\_\_\_ AND

125. TROOPER'S SIGNATURE

126. BADGE NO.

127. STATION

128. TROOP

PAGE 2 of 6



## MOTOR VEHICLE ACCIDENT DESCRIPTION

Station \_\_\_\_\_

Case No. \_\_\_\_\_

124 Accident-Description

P.D. WERE CHECKING THE DRIVER OF VEH. 2.

MEMBERS OF \_\_\_\_\_ WERE ATTENDING TO THE RESCUED OCCUPANTS OF VEH. 1 JUST NORTH OF THE TWO VEHICLES. DRIVER 2 WAS REMOVED FROM HIS VEHICLE BY THE \_\_\_\_\_ OFFICERS DUE TO THE FUEL SPILLING UNDER THE VEHICLE AND THE CLOSE PROXIMITY OF VEH. 1 ON FIRE. \_\_\_\_\_ AND I SECURED

THE SCENE AND DIVERTED TRAFFIC AROUND IT. FIRE DEPT., AMBULANCE,

FIRE DEPT., E.M.S., AND F.A.S. ALSO RESPONDED TO THE SCENE. THE FIRE WAS EXTINGUISHED BY THE FIRE DEPARTMENTS. DRIVER AND PASSENGER OF VEH. 1 WERE TRANSPORTED TO UNIVERSITY HOSPITAL IN \_\_\_\_\_ BY \_\_\_\_\_ AND

FIRST AID SQUADS RESPECTIVELY. DRIVER 2 WAS TRANSPORTED TO \_\_\_\_\_ BY \_\_\_\_\_ FIRST AID SQUAD ALSO. BLOOD WAS DRAWN AND LOGGED AS EVIDENCE AT \_\_\_\_\_ STATION.

NORTH RESPONDED AND PROCESSED THE SCENE.

A.A.I. RESPONDED AND ASSISTED PROCESSING THE SCENE.

RESPONDED AND DR. \_\_\_\_\_ PRONOUNCED

THE FOUR UNKNOWN PASSENGERS IN VEH. 1 DEAD AT 5:40 AM.

AND \_\_\_\_\_ OF THE \_\_\_\_\_ PROS. OFFICE RESPONDED TO ASSIST THE INVESTIGATION.

VEH. 1, INTACT WITH THE FOUR UNKNOWN DECEASED, WERE TRANSPORTED TO THE M.E. OFFICE IN \_\_\_\_\_ FOR IDENTIFICATION PURPOSES BY \_\_\_\_\_

RESPONDED TO THE

M.E. OFFICE AND ASSISTED IDENTIFYING THE FOUR UNKNOWN OCCUPANTS. THE OCCUPANTS WERE TENTATIVELY IDENTIFIED AS \_\_\_\_\_ FEMALE, AGE 72, OF \_\_\_\_\_ FEMALE,

AGE 80, OF \_\_\_\_\_ FEMALE,

AGE 69, OF \_\_\_\_\_ AND \_\_\_\_\_ FEMALE,

AGE 62, OF \_\_\_\_\_ FINAL CONFIRMATION OF THEIR

IDENTITIES IS PENDING THE RESULTS OF DENTAL RECORDS CHECK.

SUMMONSES \*

\_\_\_\_\_ WERE ISSUED TO DRIVER 2 PENDING FURTHER INVESTIGATION BY \_\_\_\_\_ AND \_\_\_\_\_

KCS OFFICE. SERVICE TICKET \_\_\_\_\_

WERE ALSO ISSUED TO RESPONDING EMERGENCY SERVICES.

: INFO. UNAVAILABLE DUE TO FIRE, TO BE PROVIDED AT A LATER DATE.

: DUE TO FIRE, IT WAS UNABLE TO DETERMINE IF 4 DECEASED IN REAR AREA WERE WEARING SAFETY DEVICES.

TROOPER'S SIGNATURE \_\_\_\_\_

BADGE NO. \_\_\_\_\_

STATION, \_\_\_\_\_

TROOP \_\_\_\_\_

PAGE 3 of 6

## MOTOR VEHICLE ACCIDENT DESCRIPTION

Station \_\_\_\_\_

Case No. \_\_\_\_\_

124 Accident Description

	NORTH	SOUTH	EAST	WEST
RP1-A	—	39' 10"	8' 4"	—
RP1-B	13' 6"	—	—	—
RP1-C	15' 7"	—	5'	—
RP1-D	2' 10"	—	19' 2"	—
RP1-E	—	2'	23' 3"	—

RP1 = REFERENCE POINT 1 NORTH EAST CORNER OF STORM DRAIN  
LOCATED 68' 8" NORTH OF MP.

A = INITIAL POINT OF IMPACT (GOUGE MARK IN LEFT LANE)

B = RIGHT FRONT TIRE OF VEHICLE 1

C = LEFT FRONT TIRE OF VEHICLE 1

D = RIGHT REAR TIRE OF VEHICLE 2

E = RIGHT FRONT TIRE OF VEHICLE 2

TROOPER'S SIGNATURE

BADGE NO.

STATION

TROOP

PAGE

4 of 6

BEST AVAILABLE

ENLARGED MOTOR VEHICLE ACCIDENT DIAGRAM

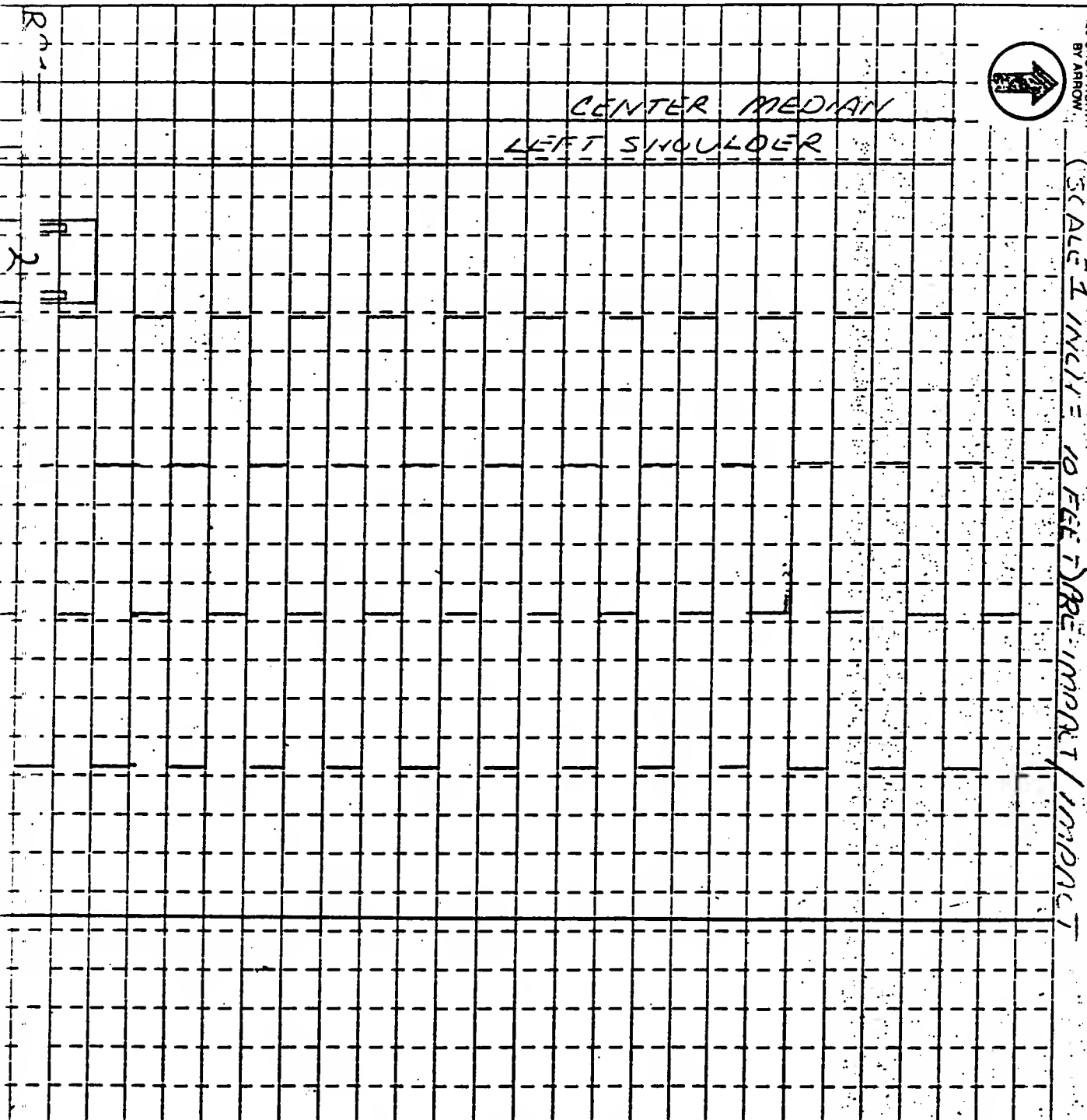
Station \_\_\_\_\_  
Case No. \_\_\_\_\_

123 SHOW NORTH  
BY ARROW.



(SCALE 1 INCH = 10 FEET) PRE-IMPACT / IMPACT

CENTER MEDIAN  
LEFT SHOULDER



MVA-4A (3-90)

TROOPER'S SIGNATURE		BADGE NO.	STATION	TROOP	PAGE 5 of 6
---------------------	--	-----------	---------	-------	-------------

MP

62'8"

1

2

pot

RIGHT SHOULDER



BEST AVAILABLE

ENLARGED MOTOR VEHICLE ACCIDENT DIAGRAM

Station \_\_\_\_\_

Case No. \_\_\_\_\_

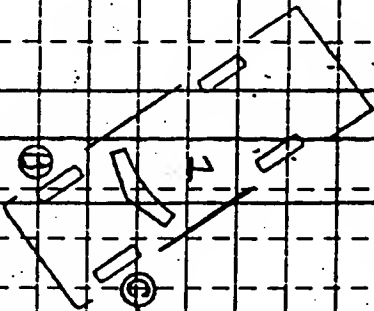
123 SHOW NORTH  
BY ARROW



SCALE 1 INCH = 10 FEET POST ACCIDENT

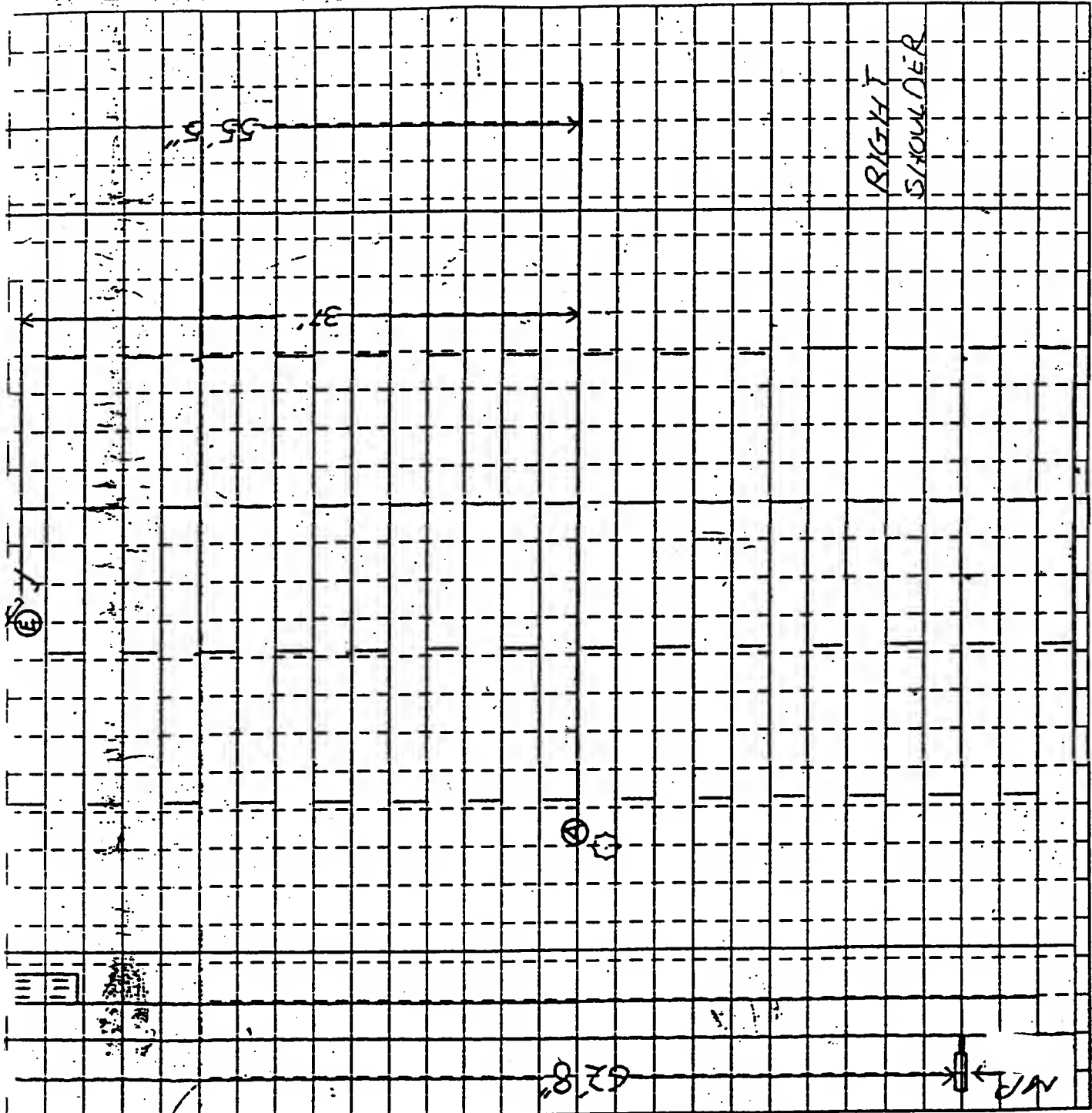
CENTER MEDIAN  
LEFT SHOULDER

33"  
10'



P 001

BEST AVAILABLE



TROOPER'S SIGNATURE	BADGE NO.	STATION	TROOP	PAGE 6 of 6



BEST AVAILABLE









BEST AVAILABLE





BEST AVAILABLE





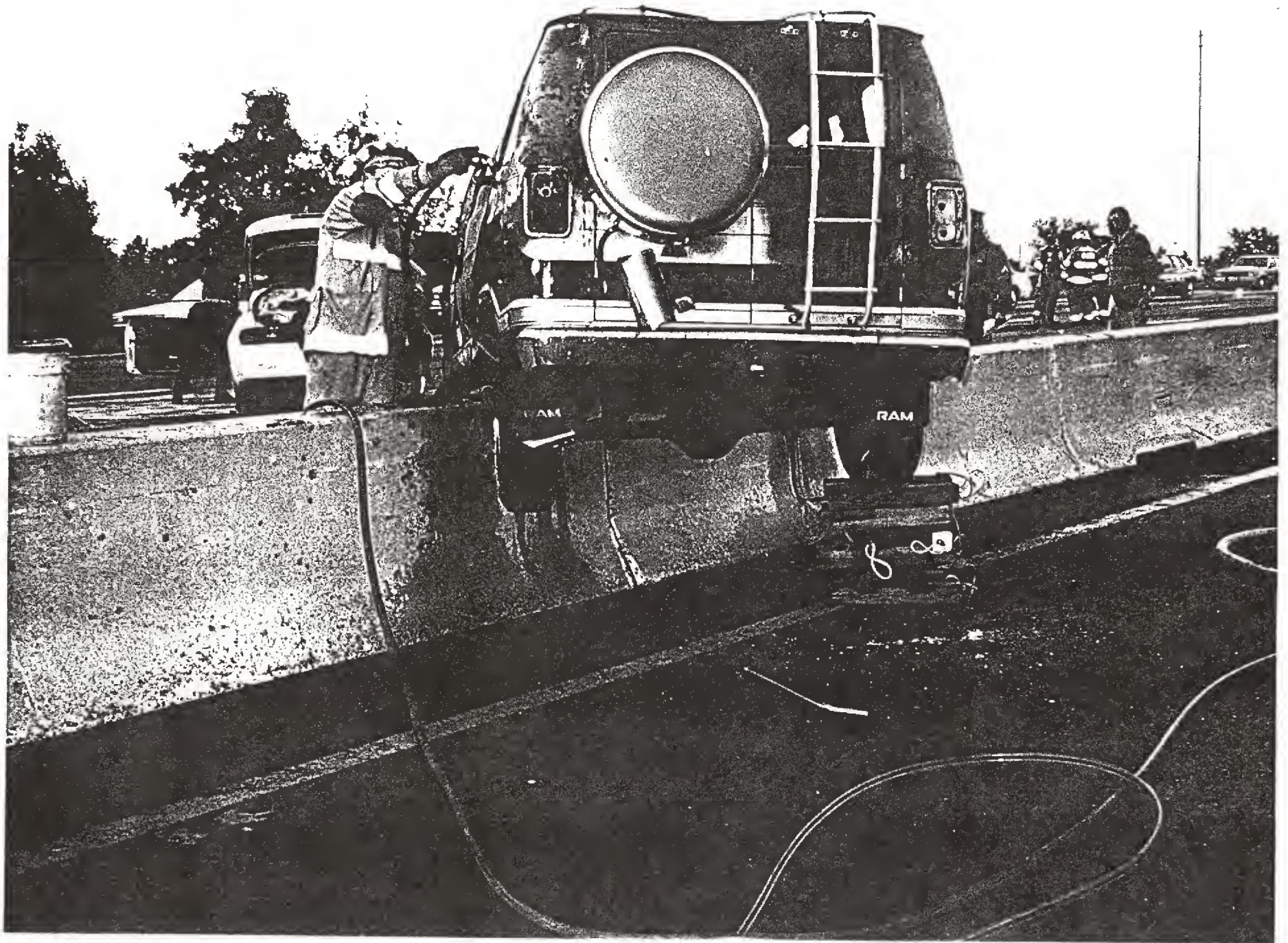
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BEST AVAILABLE





BEST AVAILABLE





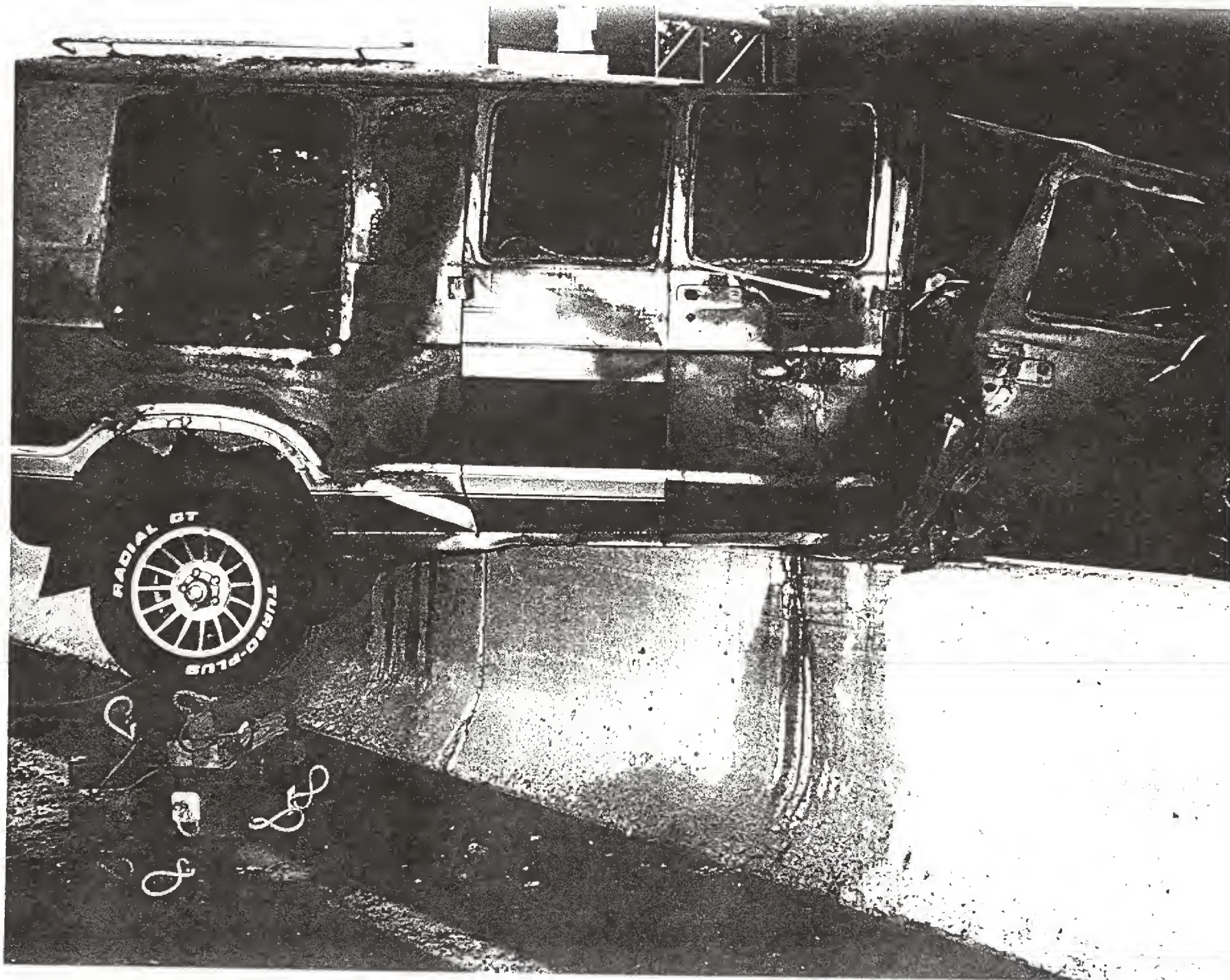
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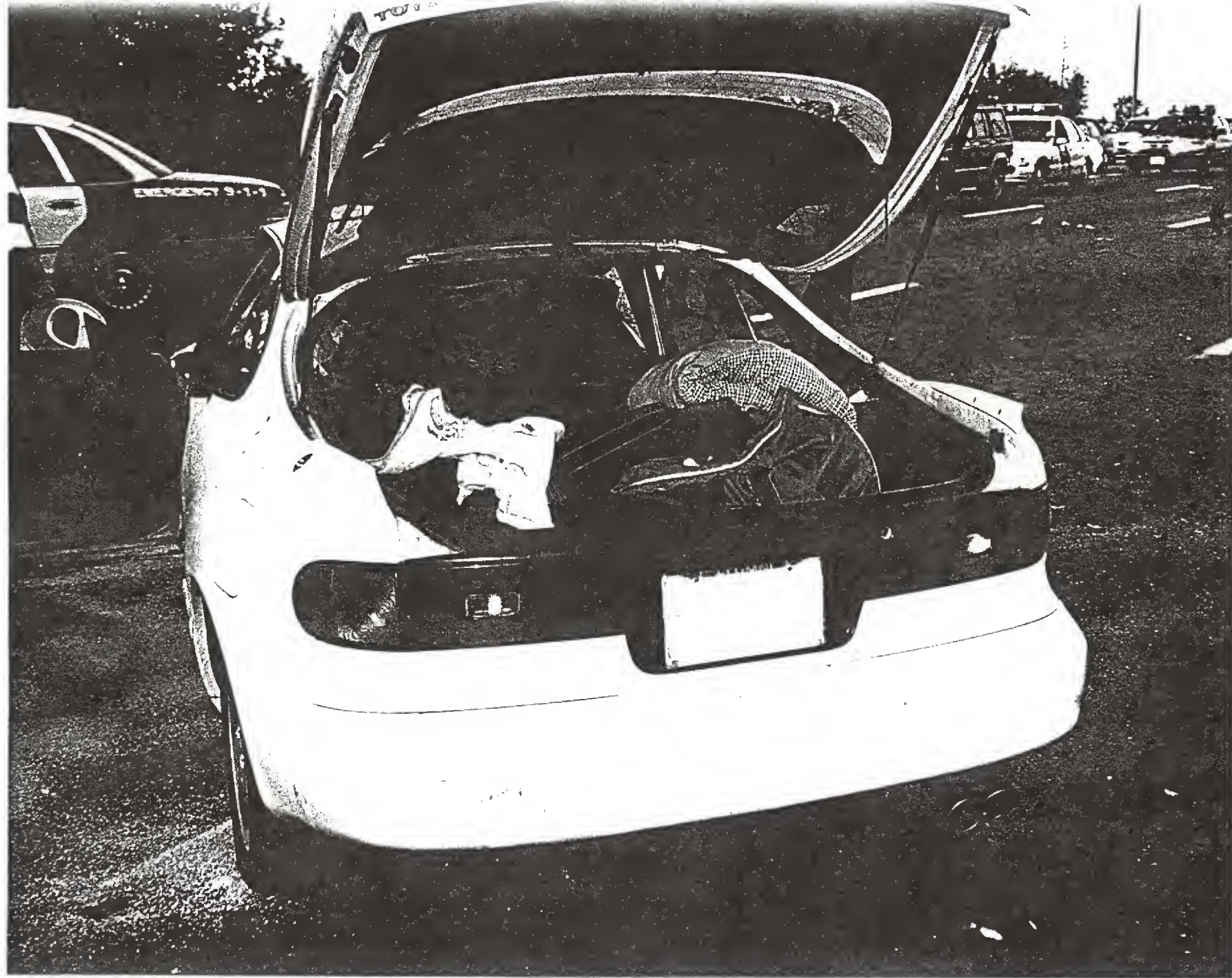
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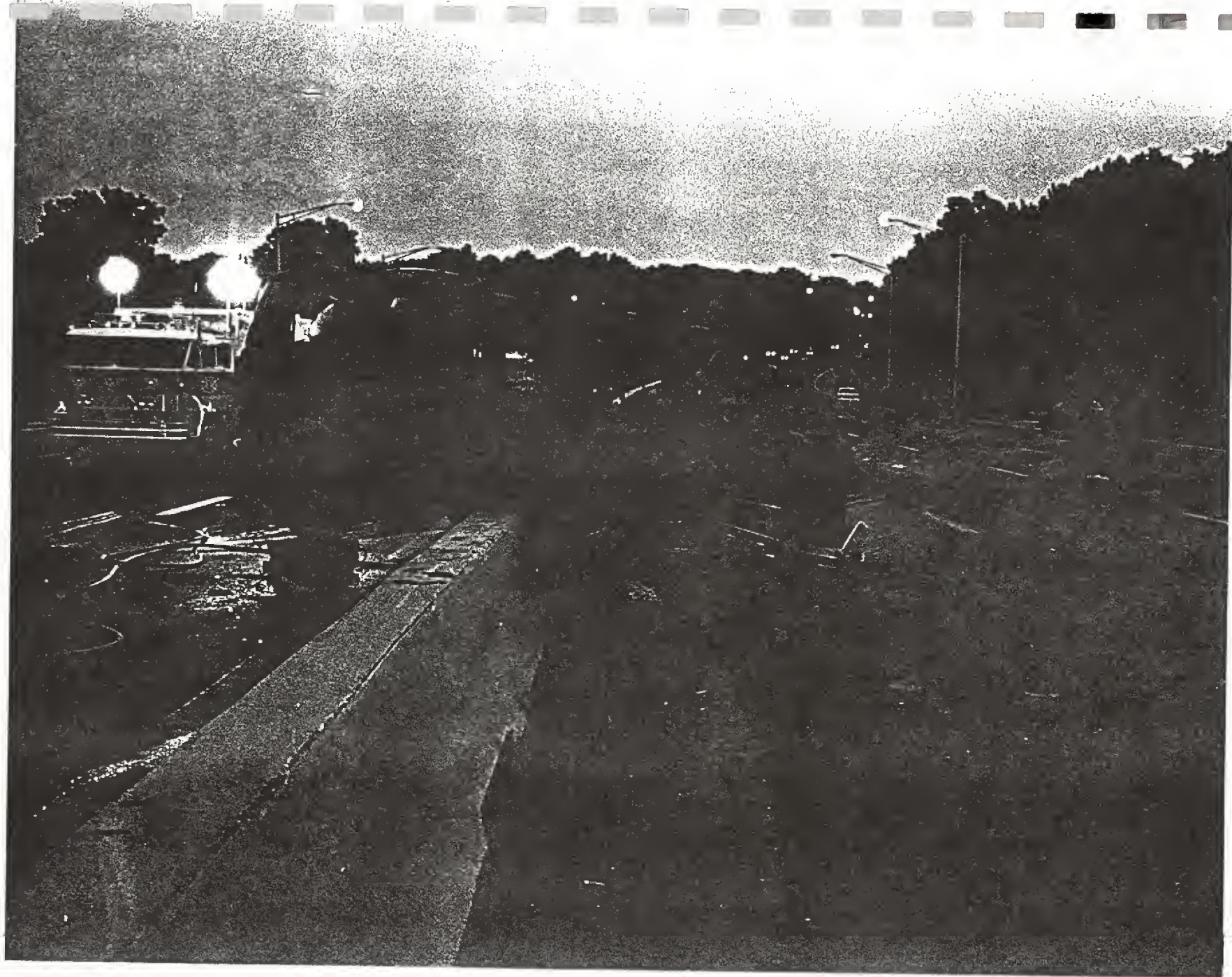
BEST AVAILABLE





BEST AVAILABLE





BEST AVAILABLE





BEST AVAILABLE



## Summary of Results Using Damage

DSI-95-SP-013

Speed Change  
(Damage)

## Vehicle #1

Total 64 km/h ( 40 mph)  
 Longitudinal -63 km/h ( -39 mph)  
 Latitudinal -11 km/h ( -7 mph)  
 PDOF Angle 10 °  
 Energy Dissipated = 429100 Joules ( 316445 Ft-Lb)  
 Barrier Equivalent Speed = 72.3 km/h ( 44.9 mph)  
 Calculated using size and stiffness categories.

## Vehicle #2

Total 94 km/h ( 58 mph)  
 Longitudinal -92 km/h ( -57 mph)  
 Latitudinal -16 km/h ( -10 mph)  
 PDOF Angle 10 °  
 Energy Dissipated = 375132 Joules ( 276646 Ft-Lb)  
 Barrier Equivalent Speed = 83.6 km/h ( 52.0 mph)  
 Calculated using size and stiffness categories.

## General Information

	Vehicle #1	Vehicle #2
Year	1983	1991
Make	Dodge	Toyota
Model	Ram Van	Celica
CDC	12FDEW7	12FDEW4
Side Damaged	F	F
PDOF Angle	10 °	10 °
Heading Angle	0 °	180 °

Calculation method: Size and Stiffness      Size and Stiffness

Size Category	7	2
Stiffness Category	7	2
Vehicle Weight	1978 kgs ( 4361 lbs)	1344 kgs ( 2963 lbs)



## ACCIDENT FORM

1. Primary Sampling Unit Number \_\_\_\_\_

2. Case Number - Stratum DSI-95-SP-013

## IDENTIFICATION

3. Number of General Vehicle  
Forms Submitted 024. Date of Accident  
(Month,Day,Year) SUMMER 1 WEEKDAY 9 55. Time of Accident EARLY MORNING

Code reported military time of accident.

NOTE: Midnight = 2400  
Unknown = 9999

## SPECIAL STUDIES - INDICATORS

Check (✓) each special study (SS15-SS18 below) that has been completed; code 1 for the checked special studies and 0 for the special studies not checked.

6. \_\_\_\_\_ SS15 Administrative Use 07. \_\_\_\_\_ SS16 Pedestrian Crash Data Study 0  
(Data for this special study available in a separate file.)8. \_\_\_\_\_ SS17 Impact Fires 09. \_\_\_\_\_ SS18 Unsafe Driver Actions 0

10. \_\_\_\_\_ SS19 \_\_\_\_\_

## NUMBER OF EVENTS

11. Number of Recorded Events  
in This Accident 04Code the number of events which occurred  
in this accident.

## ACCIDENT EVENTS

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other involved vehicle or object in the right columns.

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. <u>0 1</u>	13. <u>01</u>	14. <u>01</u>	15. <u>F</u>	16. <u>02</u>	17. <u>21</u>	18. <u>F</u>
19. <u>0 2</u>	20. <u>02</u>	21. <u>21</u>	22. <u>L</u>	23. <u>54</u>	24. <u>00</u>	25. <u>0</u>
26. <u>0 3</u>	27. <u>02</u>	28. <u>21</u>	29. <u>U</u>	30. <u>54</u>	31. <u>00</u>	32. <u>0</u>
33. <u>0 4</u>	34. <u>02</u>	35. <u>21</u>	36. <u>N</u>	37. <u>33</u>	38. <u>00</u>	39. <u>N</u>
40. <u>0 5</u>	41. _____	42. _____	43. _____	44. _____	45. _____	46. _____

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT

## CODES FOR CLASS OF VEHICLE

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>(00) Not a motor vehicle</li> <li>(01) Subcompact/mini (wheelbase &lt; 254 cm)</li> <li>(02) Compact (wheelbase ≥ 254 but &lt; 265 cm)</li> <li>(03) Intermediate (wheelbase ≥ 265 but &lt; 278 cm)</li> <li>(04) Full size (wheelbase ≥ 278 but &lt; 291 cm)</li> <li>(05) Largest (wheelbase ≥ 291 cm)</li> <li>(09) Unknown passenger car size</li> <li>(14) Compact utility vehicle</li> <li>(15) Large utility vehicle (≤ 4,500 kgs GVWR)</li> <li>(16) Utility station wagon (≤ 4,500 kgs GVWR)</li> <li>(19) Unknown utility type</li> <li>(20) Minivan (≤ 4,500 kgs GVWR)</li> <li>(21) Large van (≤ 4,500 kgs GVWR)</li> <li>(24) Van Based school bus (≤ 4,500 kgs GVWR)</li> <li>(28) Other van type (≤ 4,500 kgs GVWR)</li> <li>(29) Unknown van type (≤ 4,500 kgs GVWR)</li> <li>(30) Compact pickup truck (≤ 4,500 kgs GVWR)</li> </ul> | <ul style="list-style-type: none"> <li>(31) Large pickup truck (≤ 4,500 kgs GVWR)</li> <li>(38) Other pickup truck (≤ 4,500 kgs GVWR)</li> <li>(39) Unknown pickup truck type (≤ 4,500 kgs GVWR)</li> <li>(45) Other light truck (≤ 4,500 kgs GVWR)</li> <li>(48) Unknown light truck type (≤ 4,500 kgs GVWR)</li> <li>(49) Unknown light vehicle type</li> <li>(50) School bus (excludes van based)(&gt; 4,500 kgs GVWR)</li> <li>(58) Other bus (&gt; 4,500 kgs GVWR)</li> <li>(59) Unknown bus type</li> <li>(60) Truck (&gt; 4,500 kgs GVWR)</li> <li>(67) Tractor without trailer</li> <li>(68) Tractor-trailer(s)</li> <li>(78) Unknown medium/heavy truck type</li> <li>(79) Unknown light/medium/heavy truck type</li> <li>(80) Motored cycle</li> <li>(90) Other vehicle</li> <li>(99) Unknown</li> </ul> |
|--|--|

## CODES FOR GENERAL AREA OF DAMAGE (GAD)

- |  |  |   |   |
|--|--|---|---|
| <b>CDS APPLICABLE<br/>AND OTHER<br/>VEHICLES</b> | <ul style="list-style-type: none"> <li>(0) Not a motor vehicle</li> <li>(N) Noncollision</li> <li>(F) Front</li> </ul> | <ul style="list-style-type: none"> <li>(R) Right side</li> <li>(L) Left side</li> <li>(B) Back</li> </ul> | <ul style="list-style-type: none"> <li>(T) Top</li> <li>(U) Undercarriage</li> <li>(9) Unknown</li> </ul> |
|--|--|---|---|
- 
- |  |  |   |   |
|--|--|---|---|
| <b>TDC<br/>APPLICABLE<br/>VEHICLES</b> | <ul style="list-style-type: none"> <li>(0) Not a motor vehicle</li> <li>(N) Noncollision</li> <li>(F) Front</li> <li>(R) Right side</li> </ul> | <ul style="list-style-type: none"> <li>(L) Left side</li> <li>(B) Back of unit with cargo area<br/>(rear of trailer or straight truck)</li> <li>(D) Back (rear of tractor)</li> </ul> | <ul style="list-style-type: none"> <li>(C) Rear of cab</li> <li>(V) Front of cargo area</li> <li>(T) Top</li> <li>(U) Undercarriage</li> <li>(9) Unknown</li> </ul> |
|--|--|---|---|

## CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

- |  |   |
|--|---|
| <p>(01-30) — Vehicle Number</p> <p><b>Noncollision</b></p> <ul style="list-style-type: none"> <li>(31) Overturn — rollover (excludes end-over-end)</li> <li>(32) Rollover — end-over-end</li> <li>(33) Fire or explosion</li> <li>(34) Jackknife</li> <li>(35) Other intraunit damage (specify): _____</li> <li>(36) Noncollision injury</li> <li>(38) Other noncollision (specify): _____</li> <li>(39) Noncollision — details unknown</li> </ul> <p><b>Collision With Fixed Object</b></p> <ul style="list-style-type: none"> <li>(41) Tree (≤ 10 cm in diameter)</li> <li>(42) Tree (&gt; 10 cm in diameter)</li> <li>(43) Shrubbery or bush</li> <li>(44) Embankment</li> <li>(45) Breakaway pole or post (any diameter)</li> </ul> <p><b>Nonbreakaway Pole or Post</b></p> <ul style="list-style-type: none"> <li>(50) Pole or post (≤ 10 cm in diameter)</li> <li>(51) Pole or post (&gt; 10 cm but ≤ 30 cm in diameter)</li> <li>(52) Pole or post (&gt; 30 cm in diameter)</li> <li>(53) Pole or post (diameter unknown)</li> <li>(54) Concrete traffic barrier</li> <li>(55) Impact attenuator</li> <li>(56) Other traffic barrier (includes guardrail)<br/>(specify): _____</li> </ul> | <ul style="list-style-type: none"> <li>(57) Fence</li> <li>(58) Wall</li> <li>(59) Building</li> <li>(60) Ditch or culvert</li> <li>(61) Ground</li> <li>(62) Fire hydrant</li> <li>(63) Curb</li> <li>(64) Bridge</li> <li>(68) Other fixed object (specify): _____</li> <li>(69) Unknown fixed object</li> </ul> <p><b>Collision with Nonfixed Object</b></p> <ul style="list-style-type: none"> <li>(70) Passenger car, light truck, van, or other vehicle not in-transport</li> <li>(71) Medium/heavy truck or bus not in-transport</li> <li>(72) Pedestrian</li> <li>(73) Cyclist or cycle</li> <li>(74) Other nonmotorist or conveyance</li> <li>(75) Vehicle occupant</li> <li>(76) Animal</li> <li>(77) Train</li> <li>(78) Trailer, disconnected in transport</li> <li>(79) Object fell from vehicle in-transport</li> <li>(88) Other nonfixed object (specify): _____</li> <li>(89) Unknown nonfixed object</li> <li>(98) Other event (specify): _____</li> <li>(99) Unknown event or object</li> </ul> |
|--|---|



# GENERAL VEHICLE FORM

1. Primary Sampling Unit Number \_\_\_\_\_  
 2. Case Number - Stratum DS1-95-5P-0/3  
 3. Vehicle Number 0 1

## VEHICLE IDENTIFICATION

4. Vehicle Model Year 83  
Code the last two digits of the model year  
(99) Unknown
5. Vehicle Make (specify): 07  
DODGE  
Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown
6. Vehicle Model (specify): 461  
RAM VAN  
Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(999) Unknown
7. Body Type 21  
Note: Applicable codes may be found on  
the back of this page.
8. Vehicle Identification Number  
2B7HB23T6DKXXXXX  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17  
Left justify; Slash zeros and letter Z (0 and Z)  
No VIN—Code all zeros  
Unknown—Code all nines
9. Vehicle Special Use (This Trip) 0  
(0) No special use  
(1) Taxi  
(2) Vehicle used as school bus  
(3) Vehicle used as other bus  
(4) Military  
(5) Police  
(6) Ambulance  
(7) Fire truck or car  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

# OFFICIAL RECORDS

10. Police Reported Vehicle Disposition 1  
 (0) Not towed due to vehicle damage  
 (1) Towed due to vehicle damage  
 (9) Unknown
11. Police Reported Travel Speed 9 9 9  
 Code to the nearest kmph (NOTE: 000 means  
 less than 0.5 kmph)  
 (160) 159.5 kmph and above  
 (999) Unknown
- \_\_\_\_\_ mph X 1.6093 = \_\_\_\_\_ kmph

12. Speed Limit 0 8 9  
 (000) No statutory limit  
 Code posted or statutory speed limit  
 in kmph  
 (999) Unknown

55 mph X 1.6093 = 89 kmph

13. Police Reported Alcohol Presence For Driver 9
- (0) No alcohol present  
(1) Yes alcohol present  
(7) Not reported  
(8) No driver present  
(9) Unknown

14. Alcohol Test Result For Driver 97  
Code actual value (decimal implied  
before first digit—0.xx)  
(95) Test refused  
(96) None given  
(97) AC test performed, results unknown  
(98) No driver present  
(99) Unknown

Source: PAR

15. Police Reported Other Drug Presence For Driver 9
- (0) No other drug(s) present  
(1) Yes other drug(s) present  
(7) Not reported  
(8) No driver present  
(9) Unknown

16. Other Drug Specimen Test Result For Driver 9
- (0) No specimen test given
- (1) Drug(s) not found in specimen
- (2) Drug(s) found in specimen, (specify):
- 
- (3) Specimen test given, results unknown or not obtained
- (8) No driver present
- (9) Unknown if specimen test given

17. Driver's Zip Code
- (00001) Driver not a resident of U.S. or territories  
Code actual 5-digit zip code  
(99998) No driver present  
(99999) Unknown

18. Driver's Race/Ethnic Origin 9
- (1) White (non-Hispanic)
- (2) Black (non-Hispanic)
- (3) White (Hispanic)
- (4) Black (Hispanic)
- (5) American Indian, Eskimo or Aleut
- (6) Asian or Pacific Islander
- (7) Other (specify): \_\_\_\_\_
- (8) No driver present
- (9) Unknown

# CODES FOR BODY TYPE

## CDS APPLICABLE VEHICLES

### Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): \_\_\_\_\_
- (09) Unknown automobile type

### Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

### Utility Vehicles ( $\leq 4,500$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Hummer, Landcruiser, Rover, Scout, Yukon)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

### Van Based Light Trucks ( $\leq 4,500$ kgs GVWR)

- (20) Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ( $\leq 4,500$  kgs GVWR)
- (23) Van based motorhome ( $\leq 4,500$  kgs GVWR)
- (24) Van based school bus ( $\leq 4,500$  kgs GVWR)
- (25) Van based other bus ( $\leq 4,500$  kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): \_\_\_\_\_
- (29) Unknown van type

### Light Conventional Trucks (Pickup style cab, $\leq 4,500$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)

- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

### Other Light Trucks ( $\leq 4,500$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

## OTHER VEHICLES

### Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): \_\_\_\_\_
- (59) Unknown bus type

### Medium/Heavy Trucks ( $> 4,500$ kgs GVWR)

- (60) Step van ( $> 4,500$  kgs GVWR)
- (61) Single unit straight truck ( $4,500$  kgs  $<$  GVWR  $\leq 8,850$  kgs)
- (62) Single unit straight truck ( $8,850$  kgs  $<$  GVWR  $\leq 12,000$  kgs)
- (63) Single unit straight truck ( $> 12,000$  kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

### Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): \_\_\_\_\_
- (89) Unknown motored cycle type

### Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

## PRECRASH ENVIRONMENTAL DATA

19. Relation To Interchange Or Junction φ

- (0) Non-interchange area and non-junction
- (1) Interchange area related

*Non-Interchange junctions*

- (2) Intersection related
- (3) Driveway, alley access related
- (4) Other junction (specify) \_\_\_\_\_

- (5) Unknown type of junction

- (9) Unknown

20. Trafficway Flow 2

- (0) Not physically divided (two way traffic)
- (1) Divided trafficway-median strip without positive barrier
- (2) Divided trafficway-median strip with positive barrier
- (3) One way traffic
- (9) Unknown

21. Number Of Travel Lanes 5

- (1) One
- (2) Two
- (3) Three
- (4) Four
- (5) Five
- (6) Six
- (7) Seven or more
- (9) Unknown

22. Roadway Alignment 1

- (1) Straight
- (2) Curve right
- (3) Curve left
- (9) Unknown

23. Roadway Profile 2

- (1) Level
- (2) Uphill grade (>2%)
- (3) Hill crest
- (4) Downhill grade (>2%)
- (5) Sag
- (9) Unknown

24. Roadway Surface Type 2

- (1) Concrete
- (2) Bituminous (asphalt)
- (3) Brick or block
- (4) Slag, gravel, or stone
- (5) Dirt
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

25. Roadway Surface Condition 1

- (1) Dry
- (2) Wet
- (3) Snow or slush
- (4) Ice
- (5) Sand, dirt, or oil
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

26. Light Conditions 3

- (1) Daylight
- (2) Dark
- (3) Dark, but lighted
- (4) Dawn
- (5) Dusk
- (9) Unknown

27. Atmospheric Conditions φ

- (0) No adverse atmospheric-related driving conditions
- (1) Rain
- (2) Sleet/hail
- (3) Snow
- (4) Fog
- (5) Rain and fog
- (6) Sleet and fog
- (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): \_\_\_\_\_
- (9) Unknown

28. Traffic Control Device φ

- (0) No traffic control(s)
- (1) Traffic control signal (not RR crossing)

*Regulatory*

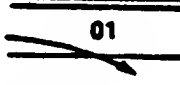

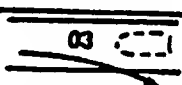
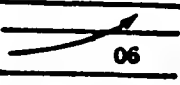
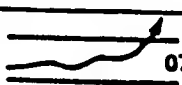
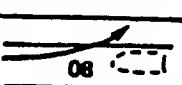
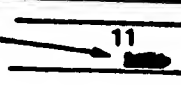


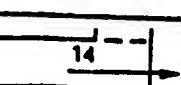
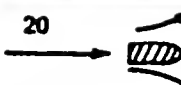
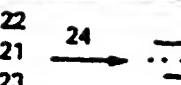
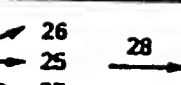
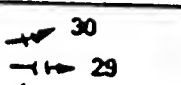
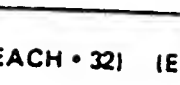
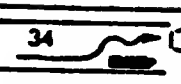

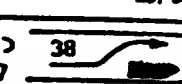
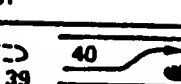

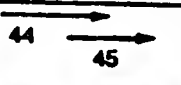
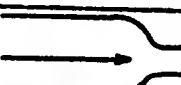
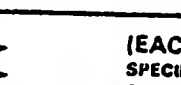
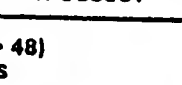
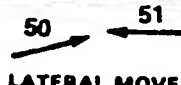
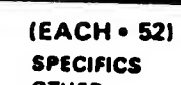

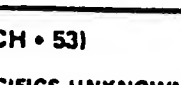
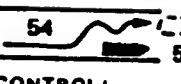
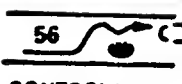
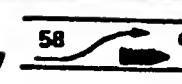
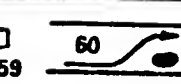

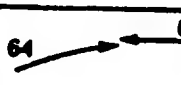

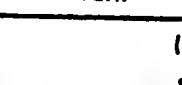
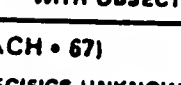

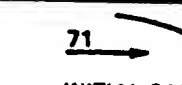
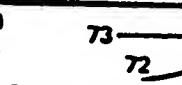

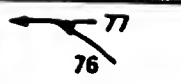



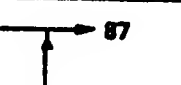

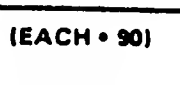

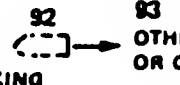


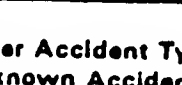
- (2) Stop sign
- (3) Yield sign
- (4) School zone sign
- (5) Other regulatory sign (specify): \_\_\_\_\_

- (6) Warning sign (not RR crossing)
- (7) Unknown sign
- (8) Miscellaneous/other controls including RR controls (specify): \_\_\_\_\_
- (9) Unknown

29. Traffic Control Device Functioning φ

- (0) No traffic control device
- (1) Traffic control device not functioning (specify) \_\_\_\_\_
- (2) Traffic control device functioning properly
- (9) Unknown



Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I. Single Driver	A. Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B. Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C. Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER 16 SPECIFICS UNKNOWN
II Same Trafficway Same Direction	D. Rear-End	 20 STOPPED 21, 22, 23	 22 SLOWER 24, 25, 26, 27	 26 DECEL. 28, 29, 30, 31	 30 SPECIFICS OTHER	 31 SPECIFICS UNKNOWN
	E. Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	 41 SPECIFICS OTHER
	F. Sideswipe Angle	 44 SPECIFICS OTHER	 45 SPECIFICS OTHER	 46 SPECIFICS OTHER	 47 SPECIFICS OTHER	(EACH • 42) (EACH • 43) (EACH • 48) (EACH • 49) SPECIFICS UNKNOWN
III Same Trafficway Opposite Direction	G. Head-On	 50 LATERAL MOVE	 51 SPECIFICS OTHER	 52 SPECIFICS UNKNOWN	 53 SPECIFICS UNKNOWN	(EACH • 52) (EACH • 53) SPECIFICS UNKNOWN
	H. Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	 61 SPECIFICS OTHER
	I. Sideswipe Angle	 64 LATERAL MOVE	 65 SPECIFICS OTHER	 66 SPECIFICS UNKNOWN	 67 SPECIFICS UNKNOWN	(EACH • 62) (EACH • 63) (EACH • 66) (EACH • 67) SPECIFICS UNKNOWN
IV. Change Trafficway Vehicle Turning	J. Turn Across Path	 68 INITIAL OPPOSITE DIRECTIONS	 69 INITIAL SAME DIRECTIONS	 70 SPECIFICS OTHER	 71 SPECIFICS UNKNOWN	(EACH • 74) (EACH • 75) SPECIFICS UNKNOWN
	K. Turn Into Path	 76 TURN INTO SAME DIRECTION	 77 TURN INTO OPPOSITE DIRECTIONS	 78 SPECIFICS OTHER	 79 SPECIFICS UNKNOWN	(EACH • 84) (EACH • 85) SPECIFICS UNKNOWN
V. Intersecting Paths (Vehicle Damage)	L. Straight Paths	 86 SPECIFICS OTHER	 87 SPECIFICS OTHER	 88 SPECIFICS OTHER	 89 SPECIFICS UNKNOWN	(EACH • 90) (EACH • 91) SPECIFICS UNKNOWN
VI. Miscellaneous	M. Backing Etc.	 92 BACKING VEH.	 93 OTHER VEH. OR OBJECT	 94 SPECIFICS OTHER	 95 SPECIFICS UNKNOWN	96 Other Accident Type 97 Unknown Accident Type 98 No Impact

## PRECRASH DRIVER RELATED DATA

30. Driver's Distraction/Inattention To Driving  
(Prior To Recognition Of Critical Event) 99

- (00) No driver present
- (01) Attentive or not distracted
- (02) Looked but did not see
- (03) By other occupant(s), (specify): \_\_\_\_\_
- (04) By moving object in vehicle (specify): \_\_\_\_\_
- (05) While talking or listening to cellular phone (specify location and type of phone): \_\_\_\_\_
- (06) While dialing cellular phone (specify location and type of phone): \_\_\_\_\_
- (07) While adjusting climate controls
- (08) While adjusting radio, cassette, CD (specify): \_\_\_\_\_
- (09) While using other device/object in vehicle (specify): \_\_\_\_\_
- (10) Sleepy or fell asleep
- (11) Distracted by outside person, object, or event (specify): \_\_\_\_\_
- (12) Eating or drinking
- (13) Smoking related
- (97) Distracted/inattentive, details unknown
- (98) Other, distraction (specify): \_\_\_\_\_
- (99) Unknown

31. Pre-Event Movement (Prior to Recognition of Critical Event) 01

- (00) No driver present
- (01) Going straight
- (02) Decelerating in traffic lane
- (03) Accelerating in traffic lane
- (04) Starting in traffic lane
- (05) Stopped in traffic lane
- (06) Passing or overtaking another vehicle
- (07) Disabled or parked in travel lane
- (08) Leaving a parking position
- (09) Entering a parking position
- (10) Turning right
- (11) Turning left
- (12) Making a U-turn
- (13) Backing up (other than for parking position)
- (14) Negotiating a curve
- (15) Changing lanes
- (16) Merging
- (17) Successful avoidance maneuver to a previous critical event
- (97) Other (specify): \_\_\_\_\_
- (99) Unknown

32. Critical Precrash Event 54*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): \_\_\_\_\_
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): \_\_\_\_\_
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): \_\_\_\_\_
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): \_\_\_\_\_
- (09) Unknown cause of control loss

*This Vehicle Traveling*

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (18) This vehicle decelerating
- (19) Unknown travel direction

*Other Motor Vehicle In Lane*

- (50) Other vehicle stopped
- (51) Traveling in same direction with lower steady speed
- (52) Traveling in same direction while decelerating
- (53) Traveling in same direction with higher speed
- (54) Traveling in opposite direction
- (55) In crossover
- (56) Backing
- (59) Unknown travel direction of other motor vehicle in lane

*Other Motor Vehicle Encroaching Into Lane*

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

*Pedestrian, Pedalcyclist, or Other Nonmotorist*

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian—unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): \_\_\_\_\_
- (84) Pedalcyclist or other nonmotorist approaching roadway, (specify): \_\_\_\_\_
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): \_\_\_\_\_

*Object or Animal*

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location
- (98) Other critical precrash event (specify): \_\_\_\_\_
- (99) Unknown

33. Attempted Avoidance Maneuver 01

- (00) No driver present
- (01) No avoidance maneuver
- (02) Braking (no lockup)
- (03) Braking (lockup)
- (04) Braking (lockup unknown)
- (05) Releasing brakes
- (06) Steering left
- (07) Steering right
- (08) Braking and steering left
- (09) Braking and steering right
- (10) Accelerating
- (11) Accelerating and steering left
- (12) Accelerating and steering right
- (98) Other action (specify):

(99) Unknown

34. Pre-Impact Stability 1

- (0) No driver present
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify):

(9) Precrash stability unknown

35. Pre-Impact Location 1

- (0) No driver present
- (1) Stayed in original travel lane
- (2) Stayed on roadway but left original travel lane
- (3) Stayed on roadway, not known if left original travel lane
- (4) Departed roadway
- (5) Remained off roadway
- (6) Returned to roadway
- (7) Entered roadway
- (9) Unknown

36. Accident Type 52

(Note: Applicable codes on back of this page)

(00) No impact

Code the number of the diagram that best describes the accident circumstance

(98) Other accident type (specify):

(99) Unknown

**STOP HERE IF GV07 DOES NOT EQUAL 01 - 49**



## OCCUPANT RELATED

37. Driver Presence in Vehicle 1  
 (0) Driver not present  
 (1) Driver present  
 (9) Unknown
38. Number of Occupants This Vehicle 6  
 (00-96) Code actual number of occupants for this vehicle  
 (97) 97 or more  
 (99) Unknown
39. Number of Occupant Forms Submitted 6

## AIR BAG RELATED

40. Is this an AOPS Vehicle? 0  
 (0) No (includes unknown)  
 (1) Yes - researcher determined  
 (2) VIN determined air bag system  
 (3) VIN determined automatic (passive) belts  
 (4) VIN determined air bag and automatic (passive) belts
41. Air Bag(s) Deployment, First Seat Frontal 0  
 (0) Not equipped or not available  
 (1) No air bags deployed  
*Single Air Bag Vehicle*  
 (2) Driver air bag deployed  
 (3) Driver air bag, unknown if deployed  
*Multiple Air Bag Vehicle*  
 (4) Driver side only deployed  
 (5) Passenger side only deployed  
 (6) Driver and passenger side deployed  
 (7) Driver and passenger side unknown if deployed  
 (8) Air bag(s) deployed, details unknown  
 (9) Unknown
42. Air Bag(s) Deployment, Other Than First Seat Frontal 0  
 (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

Specify type of "other" air bag present: \_\_\_\_\_

## VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight 1560  
 \_\_\_\_\_ Code weight to nearest 10 kilograms.  
 (045) Less than 450 kilograms  
 (610) 6,100 kilograms or more  
 (999) Unknown  
3,473 lbs X .4536 = 1575 kgs

Source: \_\_\_\_\_

44. Vehicle Cargo Weight 9990  
 \_\_\_\_\_ Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (450) 4,500 kilograms or more  
 (999) Unknown  
 \_\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs

Source: \_\_\_\_\_

## ROLLOVER DATA

45. Rollover 0  
 (00) No rollover (no overturning)  
*Rollover (primarily about the longitudinal axis)*  
 (01-16) Code the number of quarter turns  
 (17) Rollover, 17 or more quarter turns (specify):  
 (98) Rollover--end-over-end (i.e., primarily about the lateral axis)  
 (99) Rollover (overturn), details unknown
46. Rollover Initiation Type 0  
 (00) No rollover  
 (01) Trip-over  
 (02) Flip-over  
 (03) Turn-over  
 (04) Climb-over  
 (05) Fall-over  
 (06) Bounce-over  
 (07) Collision with another vehicle  
 (08) Other rollover initiation type specify):  
 (98) Rollover--end-over-end  
 (99) Unknown rollover initiation type
47. Location of Rollover Initiation 0  
 (0) No rollover  
 (1) On roadway  
 (2) On shoulder--paved  
 (3) On shoulder--unpaved  
 (4) On roadside or divided trafficway median  
 (8) Rollover--end-over-end  
 (9) Unknown
48. Rollover Initiation Object Contacted 0  
 (Note: Applicable codes on back of page)
49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0  
 (0) No rollover  
 (1) Wheels/tires  
 (2) Side plane  
 (3) End plane  
 (4) Undercarriage  
 (5) Other location on vehicle (specify):  
 (6) Non-contact rollover forces (specify):  
 (8) Rollover--end-over-end  
 (9) Unknown
50. Direction of Initial Roll 0  
 (0) No rollover  
 (1) Roll right - primarily about the longitudinal axis  
 (2) Roll left - primarily about the longitudinal axis  
 (8) Rollover--end-over-end  
 (9) Unknown roll direction

## CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

- (00) No rollover
- (01-30) — Vehicle Number

### Noncollision

- (31) Turn-over — fall-over
- (32) No rollover impact initiation (end-over-end)
- (34) Jackknife

### Collision With Fixed Object

- (41) Tree ( $\leq 10$  cm in diameter)
- (42) Tree ( $> 10$  cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

- (45) Breakaway pole or post (any diameter)

### Nonbreakaway Pole or Post

- (50) Pole or post ( $\leq 10$  cm in diameter)
- (51) Pole or post ( $> 10$  cm but  $\leq 30$  cm in diameter)
- (52) Pole or post ( $> 30$  cm in diameter)
- (53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail)  
(specify): \_\_\_\_\_

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): \_\_\_\_\_

- (69) Unknown fixed object \_\_\_\_\_

### Collision with Nonfixed Object

- (70) Passenger car, light truck, van, or other vehicle not in-transport
- (71) Medium/heavy truck or bus not in-transport
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify): \_\_\_\_\_

- (89) Unknown nonfixed object \_\_\_\_\_

- (98) Other event (specify): \_\_\_\_\_

- (99) Unknown event or object \_\_\_\_\_

## OVERRIDE/UNDERRIDE (THIS VEHICLE)

51. Front Override/Underride (this Vehicle) Ø
52. Rear Override/Underride (this Vehicle) Ø
- (0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride

*Override (see specific CDC)*

*[Between 2 CDS applicable vehicles (Bodytype, GV07=1-49)]*

- (1) 1st CDC  
(2) 2nd CDC  
(3) Other not automated CDC (specify):  
\_\_\_\_\_

*Underride (see specific CDC)*

*[Between 2 CDS applicable vehicles (Bodytype, GV07=1-49)]*

- (4) 1st CDC  
(5) 2nd CDC  
(6) Other not automated CDC (specify):  
\_\_\_\_\_

- (7) Medium/heavy truck or bus override (of any configuration)  
(9) Unknown

## HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value

- (997) Noncollision  
(998) Impact with object  
(999) Unknown

53. Heading Angle For This Vehicle Ø Ø Ø
54. Heading Angle For Other Vehicle 18 Ø

## RECONSTRUCTION DATA

55. Towed Trailing Unit Ø
- (0) No towed unit  
(1) Yes—towed trailing unit  
(9) Unknown
56. Documentation of Trajectory Data for This Vehicle Ø
- (0) No  
(1) Yes
57. Post Collision Condition of Tree or Pole (For Highest Delta V) Ø
- (0) Not collision (for highest delta V) with tree or pole  
(1) Not damaged  
(2) Cracked/sheared  
(3) Tilted <45 degrees  
(4) Tilted ≥45 degrees  
(5) Uprooted tree  
(6) Separated pole from base  
(7) Pole replaced  
(8) Other (specify):  
\_\_\_\_\_  
(9) Unknown

## ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V

58. Basis for Total (Resultant) Delta V (highest) Ø 1

(00) No vehicle inspection

*Delta V Calculated*

- (01) Reconstruction program—damage only routine  
(02) Reconstruction program—damage and trajectory routine  
(03) Missing vehicle algorithm

*Delta V Not Calculated*

- (04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

*All vehicles within scope (CDC applicable) of reconstruction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.*

- (05) Rollover  
(06) Other non-horizontal forces  
(07) Sideswipe type damage  
(08) Severe override  
(09) Yielding object  
(10) Overlapping damage  
(11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available,  
\_\_\_\_\_

(98) Other, (specify):  
\_\_\_\_\_



## COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V

0 6 059.7 Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)

(160) 159.5 kmph and above

(999) Unknown

60. Longitudinal Component of  
Delta V

Highest

+ 0 5 9-58.8 Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: \_\_000 means greater than  
-0.5 kmph and less than +0.5 kmph)

(\_\_160) ±159.5 kmph and above

(\_\_999) Unknown

61. Lateral Component of Delta V

Highest

+ 0 1 0-10.4 Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: \_\_000 means greater than -0.5 kmph and  
less than +0.5 kmph)

(\_\_160) ±159.5 kmph and above

(\_\_999) Unknown

62. Energy Absorption

4 7 4 . 6 0 047462.4 Nearest 100 joules (highest)

\_\_\_\_ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)

(9997) 999,650 joules or more

(9999) Unknown

63. Impact Speed

Highest

9 9 8

\_\_\_\_ Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: 000 means

less than 0.5 kmph)

(160) 159.5 kmph and above

(998) Trajectory algorithm not run

(999) Unknown

## DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program  
Results (For Highest Delta V)

(0) No reconstruction

(1) Collision fits model — results appear  
reasonable

(2) Collision fits model — results appear high

(3) Collision fits model — results appear low

(4) Borderline reconstruction — results appear  
reasonable

## OTHER SPEED ESTIMATE

65. Barrier Equivalent  
Speed

Highest

0 7 676.2 Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: 000 means

less than 0.5 kmph)

(160) 159.5 kmph and above

(999) Unknown

IS MISSING VEHICLE ALGORITHM APPLICABLE FOR THIS VEHICLE? [ ] YES [4] NO

IF YES: IS A COMPLETED PROGRAM SUMMARY INCLUDED? [ ] YES [ ] NO

## ESTIMATED DELTA V

## VEHICLE INSPECTION

66. Estimated Highest Delta V (Researcher Determined)

(0) Reconstruction Delta V coded

*Estimated Delta V*

- (1) Less than 10 kmph
- (2)  $\geq 10$  kmph but  $< 25$  kmph
- (3)  $\geq 25$  kmph but  $< 40$  kmph
- (4)  $\geq 40$  kmph but  $< 55$  kmph
- (5)  $\geq 55$  kmph

*Other estimates of damage severity*

- (6) Minor
- (7) Moderate
- (8) Severe
- (9) Unknown

67. Type of Vehicle Inspection

- (0) No inspection
- (1) Vehicle fully repaired-no damage evident
- (2) Partial inspection (specify): \_\_\_\_\_
- (3) Complete inspection

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67=0), \*\*\*

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*  
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

## EXTERIOR VEHICLE FORM

**NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM**

1. Primary Sampling Unit Number		3. Vehicle Number	
2. Case Number - Stratum			

## VEHICLE IDENTIFICATION

VIN 2 B 7 H B 2 3 T 6 D K x x x x x x Model Year 9 3  
Vehicle Make (specify): DODGE Vehicle Model (specify): RAM VAN

## LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
01	FULL FRONTAL	FULL FRONTAL	C6

CRUSH PROFILE IN CENTIMETERS

**NOTES:** Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

**Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.**

**Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.**

**Use as many lines/columns as necessary to describe each damage profile.**

[illegible]



## ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	<u>127.6</u>	inches	x 2.54	=	<u>324</u> cm
Overall Length	<u>196.9</u>	inches	x 2.54	=	<u>500</u> cm
Maximum Width	<u>079.9</u>	inches	x 2.54	=	<u>203</u> cm
Curb Weight	<u>03473</u>	pounds	x .4536	=	<u>1575</u> kg
Average Track	<u>N/A</u>	inches	x 2.54	=	<u>N/A</u> cm
Front Overhang	<u>028.3</u>	inches	x 2.54	=	<u>072</u> cm
Rear Overhang	<u>040.9</u>	inches	x 2.54	=	<u>104</u> cm
Undeformed End Width	<u>073.6</u>	inches	x 2.54	=	<u>187</u> cm
Engine Size: cyl./displ.	<u>5200</u>	cc	x .001	=	<u>5.2</u> L
	<u>317</u>	CID	x .0164	=	<u>5.2</u> L

# VEHICLE DAMAGE SKETCH

## TIRE - WHEEL DAMAGE

- a. Rotation physically restricted      b. Tire deflated

RF <u>1</u>	RF <u>1</u>
LF <u>1</u>	LF <u>2</u>
RR <u>2</u>	RR <u>1</u>
LR <u>2</u>	LR <u>2</u>

(1) Yes (2) No (8) NA (9) Unk.

## TYPE OF TRANSMISSION

☐ Manual ☒ Automatic

END SHIFT  $\geq$  10 CM

☒ Yes ☐ No

## ORIGINAL SPECIFICATIONS

Wheelbase	<u>324</u>	cm
Overall Length	<u>500</u>	cm
Maximum Width	<u>203</u>	cm
Curb Weight	<u>1575</u>	kg
Average Track	<u>N/A</u>	cm
Front Overhang	<u>72</u>	cm
Rear Overhang	<u>104</u>	cm
Undeformed End Width	<u>187</u>	cm
Engine Size: cyl./displ.	<u>5.2</u>	L

## WHEEL STEER ANGLES (For locked front wheels or displaced rear axles only)

RF $\oplus$ <u>2</u>	$\circ$
LF $\oplus$ <u>2</u>	$\circ$
RR $\pm$ _____	$\circ$
LR $\pm$ _____	$\circ$

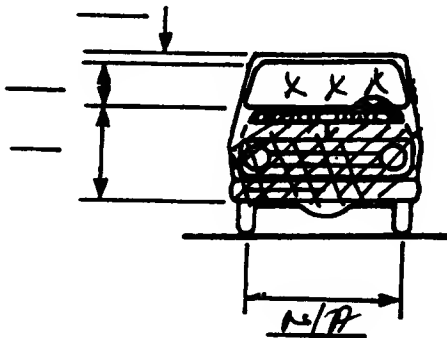
Within  $\pm$  5 degrees

## DRIVE WHEELS

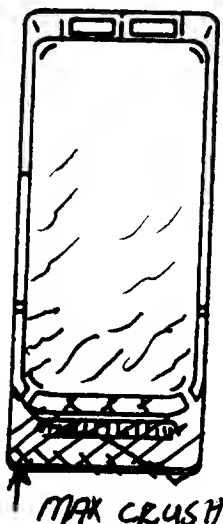
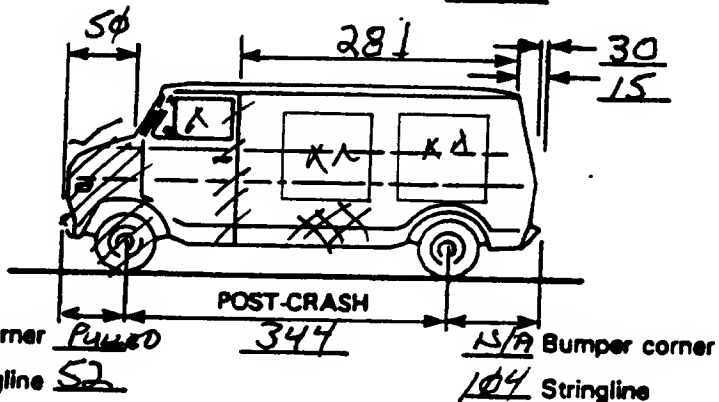
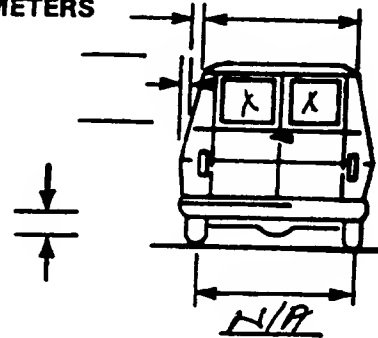
☐ FWD ☒ RWD ☐ 4WD

Approximate Cargo Weight UNK kg

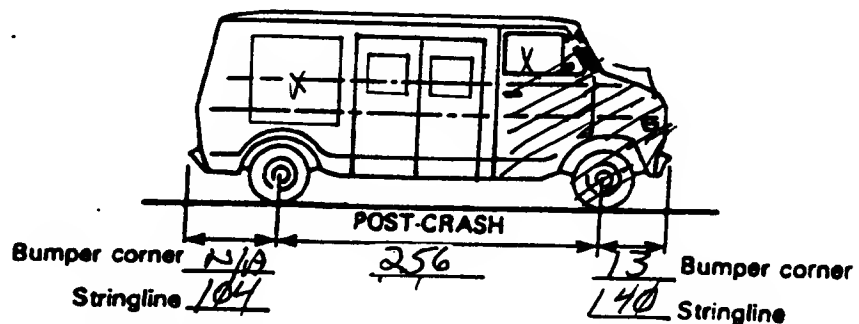
## MEASUREMENTS IN CENTIMETERS



Original Bumper height



MAX CRUSH



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

## CODES FOR OBJECT CONTACTED

(99) Unknown event or object

[illegible]



### COLLISION DEFORMATION CLASSIFICATION

#### HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>Ø 1</u>	5. <u>Ø 1</u>	6. <u>1 2</u>	7. <u>F</u>	8. <u>D</u>	9. <u>E</u>	10. <u>W</u>	11. <u>Ø 7</u>

#### Second Highest Delta "V"

12. <u>Ø 2</u>	13. <u>5 4</u>	14. <u>Ø 9</u>	15. <u>L</u>	16. <u>P</u>	17. <u>L</u>	18. <u>W</u>	19. <u>Ø 1</u>
----------------	----------------	----------------	--------------	--------------	--------------	--------------	----------------

### CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

#### HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	22. <u>±D</u>
<u>187</u>	<u>Ø Ø Ø</u>	<u>Ø Ø 5</u>	<u>Ø 2 2</u>	<u>Ø 8 5</u>	<u>Ø 9 7</u>	<u>1 2 3</u>	<u>+ Ø 2 4</u>

#### Second Highest Delta "V"

23. <u>L</u>	24. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	25. <u>±D</u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

26. Undeformed End Width  
(Coded when highest severity impact is an end plane impact.) 187  
 \_\_\_\_\_ Code to the nearest centimeter  
 (250) 250 centimeters or more  
 (998) No highest severity end plane impact  
 (999) Unknown

27. Direct Damage Width  
(For highest severity impact) 140  
 \_\_\_\_\_ Code to the nearest centimeter  
 (250) 250 centimeters or more  
 (999) Unknown

28. Original Wheelbase 324  
 \_\_\_\_\_ Code to the nearest centimeter  
 (650) 650 centimeters or more  
 (999) Unknown  
127.6 inches X 2.54 = 324 centimeters

29. Original Average Track Width 999  
 \_\_\_\_\_ Code to the nearest centimeter  
 (185) 185 centimeters or more  
 (999) Unknown  
 \_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

## FUEL SYSTEM

30. Are CDCs Documented  
but Not Coded on The  
Automated File?

- (0) No  
(1) Yes

1

31. Researcher's Assessment of Vehicle  
Disposition

- (0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

1

32. Is This A Multi-Stage Manufactured Vehicle  
And/Or A Certified Altered Vehicle?

- (0) No post manufacturer modifications  
(1) Yes - post manufacturer modifications  
(specify): \_\_\_\_\_

0

(Include photograph of CERTIFICATION  
PLACARD in case report)

- (9) Unknown if vehicle is modified

## FIRE OCCURRENCE

33. Fire Occurrence

- (0) No fire

2

Yes, fire occurred

- (1) Minor  
(2) Major  
(9) Unknown

34. Origin of Fire

- (0) No fire  
(1) Vehicle exterior (front, side, back, top)  
(2) Exhaust system  
(3) Fuel tank (and other fuel retention  
system parts)  
(4) Engine compartment  
(5) Cargo/trunk compartment  
(6) Instrument panel  
(7) Passenger compartment area  
(8) Other location (specify): \_\_\_\_\_

4

- (9) Unknown

35. Location of Fuel Tank-1 Filler Cap

2

36. Location of Fuel Tank-2 Filler Cap

0

- (0) No fuel tank  
(1) On back plane  
(2) Aft of center of the rear wheels (rear axle) on  
left side plane  
(3) Aft of center of the rear wheels (rear axle) on  
right side plane  
(4) Forward of center of the rear wheels (rear axle)  
on left side plane  
(5) Forward of center of the rear wheels (rear axle)  
on right side plane  
(6) Over the center of the rear wheels (rear axle)  
on left side plane  
(7) Over the center of the rear wheels (rear axle)  
on right side plane  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

37. Type of Fuel Tank-1

1

38. Type of Fuel Tank-2

0

- (0) No fuel tank (electrical vehicle)  
(1) Metallic  
(2) Non-metallic  
(9) Unknown

39. Location of Fuel Tank-1

1

40. Location of Fuel Tank-2

0

- (0) No fuel tank  
(1) Aft of center of the rear wheels (rear axle)  
centered  
(2) Aft of center of the rear wheels (rear axle) left  
side  
(3) Aft of center of the rear wheels (rear axle) right  
side  
(4) Forward of center of the rear wheels (rear axle)  
centered  
(5) Forward of center of the rear wheels (rear axle)  
left side  
(6) Forward of center of the rear wheels (rear axle)  
right side  
(7) Over center of the rear wheels (rear axle)  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

41. Damage to Fuel Tank-1

9

42. Damage to Fuel Tank-2

0

- (0) No fuel tank  
(1) No damage to fuel tank  
(2) Deformed, no seam failure  
(3) Deformed, with a seam failure  
(4) Punctured  
(5) Lacerated (ripped)  
(6) Abraded (scraped)  
(7) Filler neck separation from the fuel tank  
(8) Other damage (specify): \_\_\_\_\_  
(9) Unknown

43. Leakage Location of Fuel System-1

9

44. Leakage Location of Fuel System-2

φ

(0) No fuel tank

(1) No fuel leakage

*Primary Area Of Leakage*

(2) Tank

(3) Filler neck

(4) Cap

(5) Lines/pump/filter

(6) Vent/emission recovery

(8) Other (specify): \_\_\_\_\_

(9) Unknown

45. Fuel Type-1

φ 1

46. Fuel Type-2

φ φ*Single Fuel Type*

(00) No fuel tank

(01) Gasoline

(02) Diesel

(03) CNG (Compressed Natural Gas)

(04) LPG (Liquid Petroleum Gas) also known as Propane

(05) LNG (Liquid Natural Gas)

(06) Methanol (M100 or M85)

(07) Ethanol (E100 or E85)

(08) Other (Hydrogen or others) (specify): \_\_\_\_\_

*Electric Powered or Electric/Solar Powered Vehicles*

(10) Lead Acid Battery

(11) Nickel-Iron Battery

(12) Nickel-Cadmium Battery

(13) Sodium Metal Chloride Battery

(14) Sodium Sulfur Battery

(18) Other (Specify): \_\_\_\_\_

(98) Other Hybrid (specify): \_\_\_\_\_

(99) Unknown fuel type

47. Is This Vehicle Equipped With More Than Two Fuel Tanks?

φ

(0) No (one or two tanks only)

*Yes - More Than Two Tanks*(1) Yes – no damage to any tank or filler cap and no fuel system leakage(2) Yes – no damage to any tank or filler cap but there is fuel system leakage (specify leakage location): \_\_\_\_\_(3) Yes – damage to an additional tank or filler cap and there is fuel system leakage (specify the following):

Type of tank \_\_\_\_\_

Tank location \_\_\_\_\_

Filler cap location \_\_\_\_\_

Tank damage \_\_\_\_\_

Location of leakage \_\_\_\_\_

Type of fuel \_\_\_\_\_

(9) Unknown if more than two tanks

**COMMENTS**

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\*\*\* STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED \*\*\*

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.





## INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number \_\_\_\_\_

2. Case Number - Stratum DS1-95-SP-0133. Vehicle Number 01

## INTEGRITY

4. Passenger Compartment Integrity 98

(00) No integrity loss

Yes, Integrity Was Lost Through

- (01) Windshield  
(02) Door (side)  
(03) Door/hatch (back door)  
(04) Roof  
(05) Roof glass  
(06) Side window  
(07) Rear window (backlight)  
(08) Roof and roof glass  
(09) Windshield and door (side)  
(10) Windshield and roof  
(11) Side and rear window (side window and backlight)  
(12) Windshield and side window  
(13) Door and side window  
(98) Other combination of above (specify):  
01, 02, 06, 07  
(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 3 6. RF 2 7. LR 0 8. RR 1 9. TGH 1

- (0) No door/gate/hatch  
(1) Door/gate/hatch remained closed and operational  
(2) Door/gate/hatch came open during collision  
(3) Door/gate/hatch jammed shut  
(8) Other (specify):  
\_\_\_\_\_  
(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch  
Opening in Collision. If IV05-IV09 ≠ 2, Then code 010. LF 0 11. RF 9 12. LR 0 13. RR 0 14. TGH 0

- (0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

- (1) Door operational (no damage)  
(2) Latch/striker failure due to damage  
(3) Hinge failure due to damage  
(4) Door structure failure due to damage  
(5) Door support (i.e., pillar, sill, roof side rail,  
etc.) failure due to damage  
(6) Latch/striker and hinge failure due to damage  
(8) Other failure (specify):  
\_\_\_\_\_  
(9) Unknown

## GLAZING

Type of Window/Windshield Glazing

15. WS 1 16. LF 9 17. RF 9 18. LR 9 19. RR 9  
20. BL 9 21. Roof 0 22. Other 9

- (0) No glazing  
(1) AS-1 — Laminated  
(2) AS-2 — Tempered  
(3) AS-3 — Tempered-tinted (original)  
(4) AS-2 — Tempered-with after market tint  
(5) AS-3 — Tempered-tinted (with additional after market tint)  
(6) AS-14 — Glass/Plastic  
(7) Glazing removed prior to accident  
(8) Other (specify):  
\_\_\_\_\_  
(9) Unknown

Window Precrash Glazing Status

23. WS 1 24. LF 2 25. RF 2 26. LR 1 27. RR 1  
28. BL 1 29. Roof 0 30. Other 2

- (0) No glazing  
(1) Fixed  
(2) Closed  
(3) Partially opened  
(4) Fully opened  
(7) Glazing removed prior to accident  
(9) Unknown

Glazing Damage from Impact Forces

31. WS 9 32. LF 9 33. RF 9 34. LR 9 35. RR 9  
36. BL 9 37. Roof 0 38. Other 9

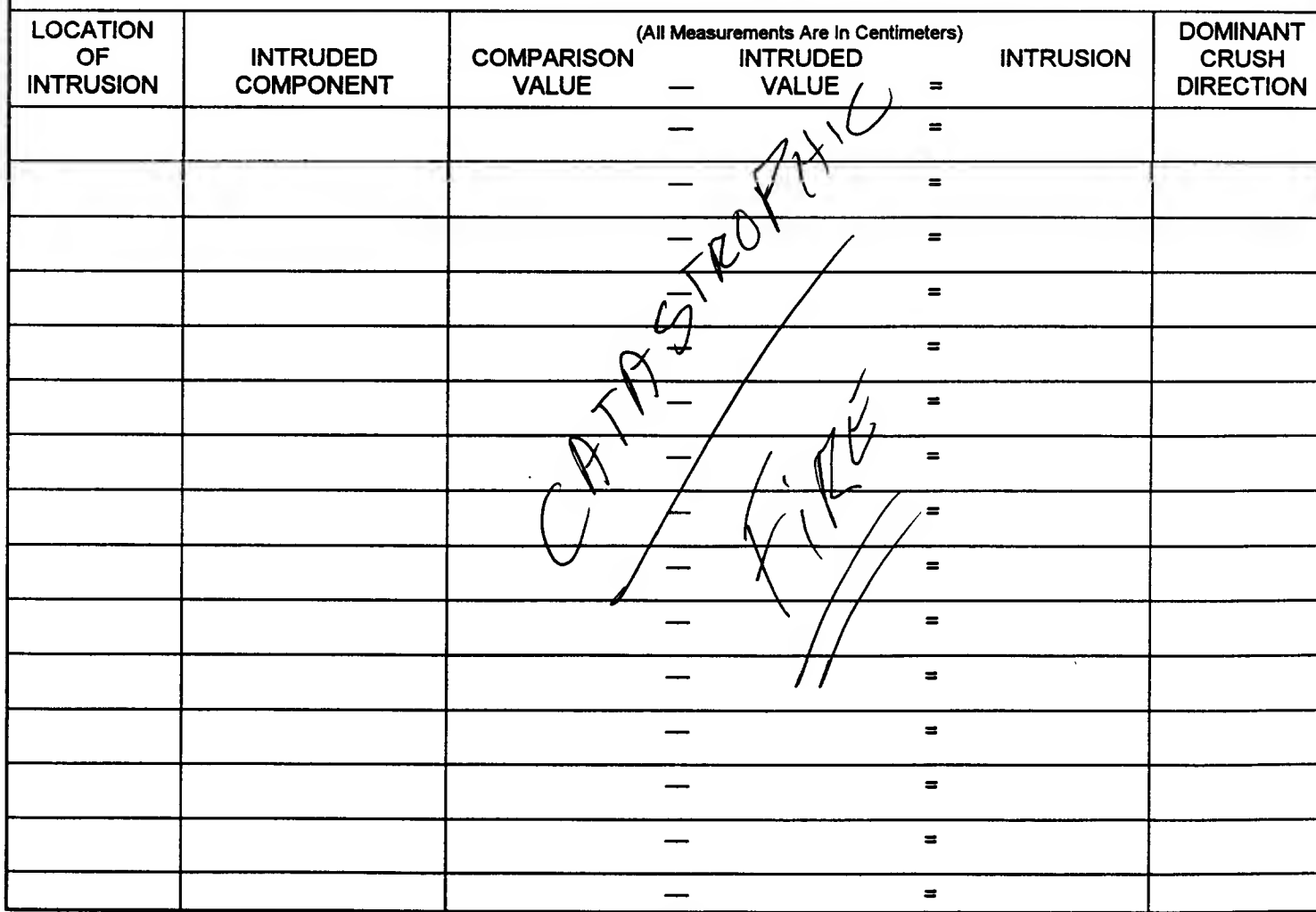
- (0) No glazing  
(1) No glazing damage from impact forces  
(2) Glazing in place and cracked from impact forces  
(3) Glazing in place and holed from impact forces  
(4) Glazing out-of-place (cracked or not) and not holed from impact  
forces  
(5) Glazing out-of-place and holed from impact forces  
(6) Glazing disintegrated from impact forces  
(7) Glazing removed prior to accident  
(9) Unknown if damaged

Glazing Damage from Occupant Contact

39. WS 9 40. LF 9 41. RF 9 42. LR 9 43. RR 9  
44. BL 9 45. Roof 0 46. Other 9

- (0) No glazing  
(1) No occupant contact to glazing  
(2) Glazing contacted by occupant but no glazing damage  
(3) Glazing in place and cracked by occupant contact  
(4) Glazing in place and holed by occupant contact  
(5) Glazing out-of-place (cracked or not) by occupant  
contact and not holed by occupant contact  
(6) Glazing out-of-place by occupant contact and holed by occupant  
contact  
(7) Glazing removed prior to accident  
(8) Glazing disintegrated by occupant contact  
(9) Unknown if contacted by occupant

**Note: Sketch intruded areas**



**Document no more than the 15 most severe intrusions**

## OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

## INTRUDING COMPONENT

Location of  
IntrusionIntruding  
ComponentMagnitude  
of IntrusionDominant  
Crush  
Direction

1st 47.\_\_\_\_ 48.\_\_\_\_ 49.\_\_\_\_ 50.\_\_\_\_

2nd 51.\_\_\_\_ 52.\_\_\_\_ 53.\_\_\_\_ 54.\_\_\_\_

3rd 55.\_\_\_\_ 56.\_\_\_\_ 57.\_\_\_\_ 58.\_\_\_\_

4th 59.\_\_\_\_ 60.\_\_\_\_ 61.\_\_\_\_ 62.\_\_\_\_

5th 63.\_\_\_\_ 64.\_\_\_\_ 65.\_\_\_\_ 66.\_\_\_\_

6th 67.\_\_\_\_ 68.\_\_\_\_ 69.\_\_\_\_ 70.\_\_\_\_

7th 71.\_\_\_\_ 72.\_\_\_\_ 73.\_\_\_\_ 74.\_\_\_\_

8th 75.\_\_\_\_ 76.\_\_\_\_ 77.\_\_\_\_ 78.\_\_\_\_

9th 79.\_\_\_\_ 80.\_\_\_\_ 81.\_\_\_\_ 82.\_\_\_\_

10th 83.\_\_\_\_ 84.\_\_\_\_ 85.\_\_\_\_ 86.\_\_\_\_

## Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Side panel - forward of the A1/A2-pillar
- (11) Door panel (side)
- (12) Side panel - rear of the B-pillar
- (13) Roof (or convertible top)
- (14) Roof side rail
- (15) Windshield
- (16) Windshield header
- (17) Window frame
- (18) Floor pan (includes sill)
- (19) Backlight header
- (20) Front seat back
- (21) Second seat back
- (22) Third seat back
- (23) Fourth seat back
- (24) Fifth seat back
- (25) Seat cushion
- (26) Back door/panel (e.g., tailgate)
- (27) Other interior component (specify): \_\_\_\_\_

## Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify): \_\_\_\_\_
- (32) Other exterior object in the environment (specify): \_\_\_\_\_
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): \_\_\_\_\_
- (99) Unknown

## LOCATION OF INTRUSION

## Front Seat

- (11) Left
- (12) Middle
- (13) Right

## Fourth Seat

- (41) Left
- (42) Middle
- (43) Right

## Second Seat

- (21) Left
- (22) Middle
- (23) Right

- (97) Catastrophic
- (98) Other enclosed area (specify) \_\_\_\_\_

(99) Unknown

## Third Seat

- (31) Left
- (32) Middle
- (33) Right

## MAGNITUDE OF INTRUSION

- (1)  $\geq 3$  centimeters but  $< 8$  centimeters
- (2)  $\geq 8$  centimeters but  $< 15$  centimeters
- (3)  $\geq 15$  centimeters but  $< 30$  centimeters
- (4)  $\geq 30$  centimeters but  $< 46$  centimeters
- (5)  $\geq 46$  centimeters but  $< 61$  centimeters
- (6)  $\geq 61$  centimeters
- (7) Catastrophic
- (9) Unknown

## DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown



# STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
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UNK

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UNK

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UNK

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## STEERING COLUMN

## INSTRUMENT PANEL

## 87. Steering Column Type

- (1) Fixed column  
 (2) Tilt column  
 (3) Telescoping column  
 (4) Tilt and telescoping column  
 (8) Other column type (specify): \_\_\_\_\_

(9) Unknown

## 88. Tilt Steering Column Adjustment

- (0) No tilt steering column  
 (1) Full up  
 (2) Between full up and center  
 (3) Center  
 (4) Between center and full down  
 (5) Full down  
 (9) Unknown

## 89. Telescoping Steering Column Adjustment

- (0) No telescoping steering column  
 (1) Full back  
 (2) Between full back and midpoint  
 (3) Midpoint  
 (4) Between midpoint and full forward  
 (5) Full forward  
 (9) Unknown

## 90. Steering Rim/Spoke Deformation

Code actual measured deformation to the nearest centimeter

- (00) No steering rim deformation  
 (01-14) Actual measured value in centimeters  
 (15) 15 centimeters or more  
 (98) Observed deformation cannot be measured  
 (99) Unknown

## 91. Location of Steering Rim/Spoke Deformation

- (00) No steering rim deformation

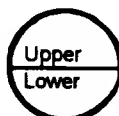
## Quarter Sections

- (01) Section A  
 (02) Section B  
 (03) Section C  
 (04) Section D



## Half Sections

- (05) Upper half of rim/spoke  
 (06) Lower half of rim/spoke  
 (07) Left half of rim/spoke  
 (08) Right half of rim/spoke



- (09) Complete steering wheel collapse  
 (10) Undetermined location  
 (99) Unknown

## 92. Odometer Reading

999,000

- \_\_\_\_\_ kilometers  
 Code to the nearest 1,000 kilometers  
 (000) No odometer  
 (001) Less than 1,500 kilometers  
 (500) 499,500 kilometers or more  
 (999) Unknown

\_\_\_\_\_ miles X 1.6093 = \_\_\_\_\_ kilometers

Source: \_\_\_\_\_

## 93. Instrument Panel Damage from Occupant Contact?

- (0) No  
 (1) Yes  
 (9) Unknown

## 94. Type of Knee Bolster Covering

- (0) No knee bolster  
 (1) Padded  
 (2) Rigid plastic  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

## 95. Knee Bolsters Deformed from Occupant Contact?

- (0) No knee bolster  
 (1) No deformation  
 (2) Yes - deformation  
 (9) Unknown

## 96. Did Glove Compartment Door Open During Collision(s)?

- (0) No glove compartment door  
 (1) No - door did not open  
 (2) Yes - door opened  
 (9) Unknown

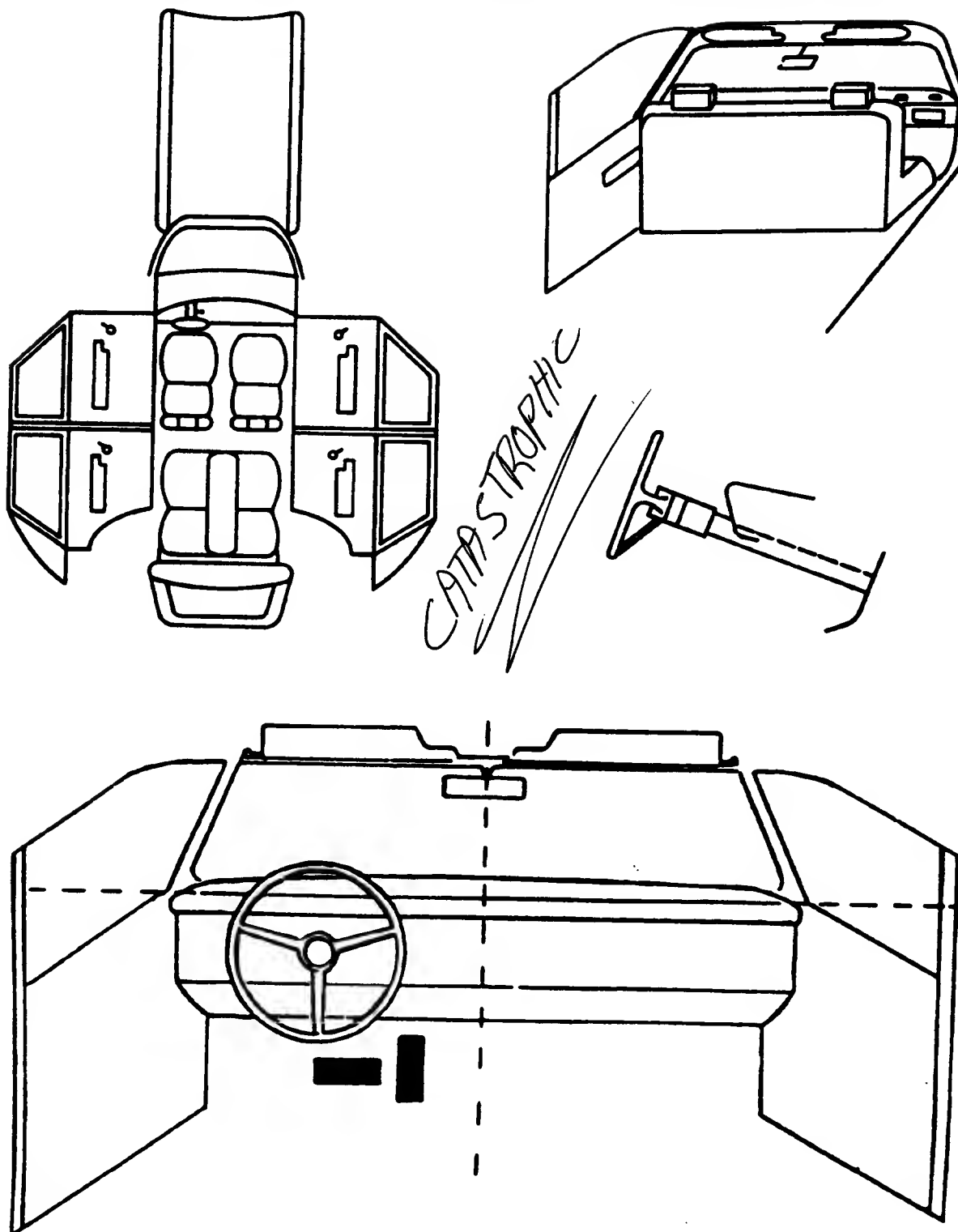
## 97. Adaptive (Assistive) Driving Equipment

- (0) No adaptive driving equipment  
 (1) Adaptive driving equipment installed (Check all that apply.)  
☐ Hand controls for braking/acceleration  
☐ Steering control devices (attached to OEM steering wheel)  
☐ Steering knob attached to steering wheel  
☐ Low effort power steering (unit or device)  
☐ Replacement steering wheel (i.e., reduced diameter)  
☐ Joy-stick steering controls  
☐ Wheelchair tie-downs  
☐ Modification to seat belts (specify): \_\_\_\_\_  
☐ Additional or relocated switches (specify): \_\_\_\_\_  
☐ Raised roof  
☐ Wall-mounted head rest (used behind wheelchair)  
☐ Other adaptive device (specify): \_\_\_\_\_

(9) Unknown

## VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).  
Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.  
Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.



## POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A					
B					
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

## FRONT

- (001) Windshield  
 (002) Mirror  
 (003) Survivor  
 (004) Steering wheel rim  
 (005) Steering wheel hub/spoke  
 (006) Steering wheel (combination of codes 004 and 005)  
 (007) Steering column, transmission selector lever, other attachment  
 (008) Cellular telephone or CB radio  
 (009) Add on equipment (e.g., tape deck, air conditioner)  
 (010) Left instrument panel and below  
 (011) Center instrument panel and below  
 (012) Right instrument panel and below  
 (013) Glove compartment door  
 (014) Knee bolster  
 (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)  
 (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)  
 (017) Windshield reinforced by exterior object, (specify):  
 (019) Other front object (specify):

## CODES FOR INTERIOR COMPONENTS

## LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests  
 (052) Left side hardware or armrest  
 (053) Left A (A1/A2)-pillar  
 (054) Left B-pillar  
 (055) Other left pillar (specify):  
 (056) Left side window glass  
 (057) Left side window frame  
 (058) Left side window sill  
 (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (060) Other left side object (specify):

## RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests  
 (102) Right side hardware or armrest  
 (103) Right A (A1/A2)-pillar  
 (104) Right B-pillar  
 (105) Other right pillar (specify):  
 (106) Right side window glass  
 (107) Right side window frame  
 (108) Right side window sill  
 (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (110) Other right side object (specify):

## INTERIOR

- (151) Seat, back support  
 (152) Belt restraint webbing/buckle  
 (153) Belt restraint B-pillar or door frame attachment point  
 (154) Other restraint system component (specify):  
 (155) Head restraint system  
 (160) Other occupants (specify):  
 (161) Interior loose objects  
 (162) Child safety seat (specify):  
 (163) Other interior object (specify):

## AIR BAG

- (170) Air bag-driver side  
 (175) Air bag compartment cover-driver side  
 (180) Air bag-passenger side  
 (185) Air bag compartment cover-passenger side  
 (190) Other air bag (specify)  
 (195) Other air bag compartment cover (specify)

## ROOF

- (201) Front header  
 (202) Rear header  
 (203) Roof left side rail  
 (204) Roof right side rail  
 (205) Roof or convertible top

## FLOOR

- (251) Floor (including toe pan)  
 (252) Floor or console mounted transmission lever, including console  
 (253) Parking brake handle  
 (254) Foot controls including parking brake

## REAR

- (301) Backlight (rear window)  
 (302) Backlight storage rack, door, etc.  
 (303) Other rear object (specify):

## ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration  
 (402) Steering control devices (attached to OEM steering wheel)  
 (403) Steering knob attached to steering wheel  
 (405) Replacement steering wheel (i.e., reduced diameter)  
 (406) Joy stick steering controls  
 (407) Wheelchair tie-downs  
 (408) Modification to seat belts, (specify):  
 (409) Additional or relocated switches, (specify):  
 (410) Raised roof  
 (411) Wall mounted head rest (used behind wheel chair)  
 (412) Other adaptive device (specify):

## CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain  
 (2) Probable  
 (3) Possible  
 (9) Unknown

# MANUAL RESTRAINTS

**NOTES** Encode the applicable data for **each seat position** in the vehicle. The attribute for the variable may be found below. Restraint systems should be **assessed** during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			
	Anchorage Adjustment			
SECOND	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			
	Anchorage Adjustment			
OTHER	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			
	Anchorage Adjustment			

## Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

### Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

- (9) Unknown

## Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify):
- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type , unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

## Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

### Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):
- (8) Other improper use of manual belt system (specify):

- (9) Unknown

## Shoulder Belt Upper Anchorage Adjustment

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

### Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

## Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):
- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other manual belt failure (specify):
- (9) Unknown

## AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

## AIR BAGS

		Left Front	Right Front	Other
F I R S T	Availability/Function			
	Deployment			
	Failure			
<b>Air Bag System Availability/Function</b> (0) Not equipped/not available (1) Air bag  <i>Non-functional</i> (2) Air bag disconnected (specify): _____  (3) Air bag not reinstalled (9) Unknown		<b>Frontal Air Bag System Deployment (This Occupant Position)</b> (0) Not equipped/not available (1) Deployed during accident (as a result of impact) (2) Deployed inadvertently just prior to accident (3) Deployed, accident sequence undetermined (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical) (5) Unknown if deployed (7) Nondeployed (9) Unknown	<b>Air Bag(s) Deployment, <u>Other</u> Than First Seat Frontal (This Occupant Position)</b> (0) Not equipped with an "other" air bag (1) Deployed during accident (as a result of impact) (2) Deployed inadvertently just prior to accident (3) Deployed, details unknown (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical) (5) Unknown if deployed (7) Nondeployed (9) Unknown	
<b>Are There Indications of Air Bag System Failure? (This Occupant Position)</b> (0) Not equipped/not available (1) No (2) Yes (specify): _____  (9) Unknown				

## AUTOMATIC BELTS

		Left	Right
F I R S T	Availability/Function		
	Use		
	Type		
	Proper Use		
	Failure Modes		
<b>Automatic (Passive) Belt System Availability/Function</b> (0) Not equipped/not available (1) 2 point automatic belts (2) 3 point automatic belts (3) Automatic belts - type unknown  <i>Non-functional</i> (4) Automatic belts destroyed or rendered inoperative (9) Unknown		<b>Proper Use of Automatic (Passive) Belt System</b> (0) Not equipped/not available/not used (1) Automatic belt used properly (2) Automatic belt used properly with child safety seat  <i>Automatic Belt Used Improperly</i> (3) Automatic shoulder belt worn under arm (4) Automatic shoulder belt worn behind back (5) Automatic belt worn around more than one person (6) Lap portion of automatic belt worn on abdomen (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____ (8) Other improper use of automatic belt system (specify): _____ (9) Unknown	
<b>Automatic (Passive) Belt System Use</b> (0) Not equipped/not available/destroyed or rendered inoperative (1) Automatic belt in use (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (3) Automatic belt use unknown (9) Unknown		<b>Automatic (Passive) Belt Failure Modes During Accident</b> (0) Not equipped/not available/not in use (1) No automatic belt failure(s) (2) Torn webbing (stretched webbing not included) (3) Broken buckle or latchplate (4) Upper anchorage separated (5) Other anchorage separated (specify): _____ (6) Broken retractor (7) Combination of above (specify): _____ (8) Other automatic belt failure (specify): _____ (9) Unknown	
<b>Automatic (Passive) Belt System Type</b> (0) Not equipped/not available (1) Non-motorized system (2) Motorized system (9) Unknown			



# FIRST SEAT FRONTAL AIR BAGS

NOTES. Encode the applicable data for the driver and first seat passenger in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
Type of air bag?		
Flaps open at tear points?		
Flaps damaged?		
Air bag damaged?	1	1
Source of air bag damage		
Air bag tethered?		
Air bag have vent ports?		
Other occupant contact air bag?		
Occupant wearing eyewear?		

## Type of Air Bag

- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

## Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (0) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Was There Damage To The Air Bag?

- (00) Not equipped/not available
- (01) Not damaged

### Yes - Air Bag Damage

- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify):

- (95) Damaged, details unknown
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

## Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify):
- (03) Object carried by occupant, (specify):
- (04) Adaptive/assistive controls, (specify):
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify):

- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

## Was The Air Bag Tethered?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps):
- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Did The Air Bag Have Vent Ports?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports):
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Was This Occupant Wearing Eye-wear?

- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			
SECOND	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			
THIRD	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE  
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

## HEAD RESTRAINTS/SEAT EVALUATION

**Head Restraint Type/Damage by Occupant at This Occupant Position**

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other  
Specify: \_\_\_\_\_
- (9) Unknown

**Seat Performance (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**Seat Back Incline Prior and Post Impact**

- (00) Occupant not seated or no seat
- (01) Not adjustable
- Upright prior to impact*
- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position

**Seat Type (this Occupant Position)**

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

**Seat Orientation (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**Seat Track Adjusted Position Prior To Impact**

- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track

**Adjustable Seat Track**

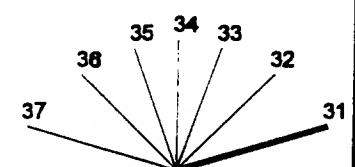
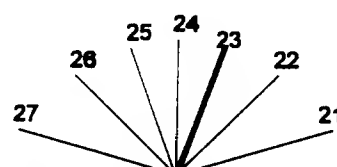
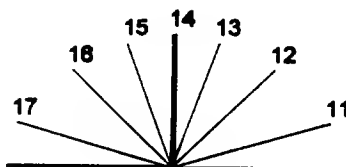
- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

*Slightly reclined prior to impact*

- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position
- (32) Moved to rearward midrange position
- (33) Moved to slightly rearward position
- (34) Moved to upright position
- (35) Moved to slightly forward position
- (36) Moved to forward midrange position
- (37) Moved to completely forward position
- (99) Unknown



Coding diagrams for Seat Back Incline Position Prior and Post Impact

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE  
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)



## CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

## 1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

## 2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):
- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation

- (99) Unknown if child safety seat used

## 3. Child Safety Seat Harness Usage

## 4. Child Safety Seat Shield Usage

## 5. Child Safety Seat Tether Usage

Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

## 6. Child Safety Seat Make/Model

(Specify make/model and occupant number)

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**EJECTION/ENTRAPMENT DATA**

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

**EJECTION** No ☒ Yes ☐

Describe indications of ejection and body parts involved in partial ejection(s):

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Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

**Ejection**

- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

**Ejection Area**

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

**(7) Roof**

- (8) Other area (e.g., back of pickup, etc.) (specify):

- (9) Unknown

**Ejection Medium**

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

**(5) Integral structure**

- (8) Other medium (specify):

- (9) Unknown

**Medium Status (Immediately Prior to Impact)**

- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

**ENTRAPMENT** No ☐ Yes ☒

Describe entrapment mechanism: \_\_\_\_\_

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Component(s): \_\_\_\_\_

(Note in vehicle interior diagram)

National Highway Traffic Safety  
AdministrationNATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

4. Occupant Number

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

Code actual height to the nearest  
centimeter.

(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

8. Occupant's Weight

Code actual weight to the nearest  
kilogram.

(999) Unknown

\_\_\_\_\_ pounds X .4536 = \_\_\_\_\_ kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

## OCCUPANT'S SEATING

10. Occupant's Seat Position

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front of  
seat

(8) Other abnormal posture (specify):

(9) Unknown



## EJECTION/ENTRAPMENT

12. Ejection Ø

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area Ø

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium Ø

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) Ø

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 9

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_
- (9) Unknown

17. Occupant Mobility 1

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or disoriented
- (2) Removed from vehicle due to injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (9) Unknown

## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 9

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): \_\_\_\_\_

(9) Unknown

19. Manual (Active) Belt System Use 9 9

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): \_\_\_\_\_

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify): \_\_\_\_\_

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 9

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident 9

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

- (6) Broken retractor
- (7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown

22. Shoulder Belt Upper Anchorage Adjustment 9

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function Ø

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use Ø

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): \_\_\_\_\_
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type Ø

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System Ø

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

- (8) Other improper use of automatic belt system (specify): \_\_\_\_\_
- (9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident Ø

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

- (6) Broken retractor
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other automatic belt failure (specify): \_\_\_\_\_

(9) Unknown

## POLICE REPORTED RESTRAINT USE

## 28. Police Reported Belt Use

- 4
- (0) None used
  - (1) Police did not indicate belt use
  - (2) Shoulder belt
  - (3) Lap belt
  - (4) Lap and shoulder belt
  - (5) Belt used, type not specified
  - (6) Child safety seat
  - (7) Automatic belt
  - (8) Other type belt, (specify):

(9) Police indicated "unknown"

## 29. Police Reported Air Bag Availability/Function

- 1
- (0) No air bag available
  - (1) Police did not indicate air bag availability/function
  - (2) Deployed
  - (3) Not deployed
  - (4) Unknown if deployed
  - (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- [ ] Not equipped/not available/destroyed or rendered inoperative
- [ ] Vehicle inspection
- [ ] Official injury data
- [ ] Driver/occupant interview
- [ ] Other (specify):

[x] Unknown if belt used

## AIR BAG SYSTEM FUNCTION

## 30. Frontal Air Bag System

Availability/Function

(This Occupant Position)

- 0
- (0) Not equipped/not available
  - (1) Air bag

Non-functional

- (2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
- (9) Unknown

## 31. Frontal Air Bag System Deployment

(This Occupant Position)

- 0
- (0) Not equipped/not available
  - (1) Deployed during accident (as a result of impact)
  - (2) Deployed inadvertently just prior to accident
  - (3) Deployed, details unknown
  - (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
  - (5) Unknown if deployed
  - (7) Nondeployed
  - (9) Unknown

## 32. Other Than First Seat Frontal Air Bag

Availability/Function

(This Occupant Position)

- 0
- (0) Not equipped/not available
  - (1) Air bag

Non-functional

- (2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
- (9) Unknown

Specify type of "other" air bag present:

## 33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position)

- 0
- (0) Not equipped with an "other" air bag
  - (1) Deployed during accident (as a result of impact)
  - (2) Deployed inadvertently just prior to accident
  - (3) Deployed, details unknown
  - (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
  - (5) Unknown if deployed
  - (7) Nondeployed
  - (9) Unknown

## 34. Are There Indications of Air Bag System Failure?

(This Occupant Position)

- 0
- (0) Not equipped/not available
  - (1) No
  - (2) Yes (specify):

(9) Unknown



## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)?  $\phi$ 

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag  $\phi$ 

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System?  $\phi$ 

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify):  
\_\_\_\_\_  
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number  $\phi\phi$ 

- (00) Not equipped/not available  
\_\_\_\_\_  
Code the accident event sequence number that initiated the air bag deployment  
(96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact  $\phi$ 

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify):  
\_\_\_\_\_  
(6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact  $\phi\phi\phi$ 

- (-000) Not equipped/not available  
Code the value of the delta V for the impact that initiated the air bag deployment  
(-996) Deployment, unknown longitudinal Delta V  
(-997) Not deployed  
(-998) Unknown if deployed  
(-999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?  $\phi$ 

- (0) Not equipped/not available  
(1) No  
(2) Yes  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged?  $\phi$ 

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify):  
\_\_\_\_\_  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag?  $\phi\phi$ 

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify):  
\_\_\_\_\_

- (95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION *continued*

## 44. Source of Air Bag Damage

(00) Not equipped/not available

(01) Not damaged

(02) Object worn by occupant, (specify):

(03) Object carried by occupant, (specify):

(04) Adaptive/assistive controls, (specify):

(05) Fire in vehicle

(06) Thermal burns

(07) Rescue or emergency efforts

(08) Other damage source (specify):

(95) Damaged, unknown source

(96) Deployed, unknown if damaged

(97) Not deployed

(98) Unknown if deployed

(99) Unknown

## 45. Was The Air Bag Tethered?

(0) Not equipped/not available

(1) No

(2) Yes (specify number of tether straps):

(3) Deployed, unknown if tethered

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

## 46. Did The Air Bag Have Vent Ports?

(0) Not equipped/not available

(1) No

(2) Yes (specify number of vent ports):

(3) Deployed, unknown if vent ports present

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

47. Was the Air Bag in this Occupant's Position  
Contacted by Another Occupant?

(0) Not equipped/not available

(1) No

(2) Yes (specify):

(3) Deployed, unknown if other occupant contact to  
air bag

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

## 48. Was This Occupant Wearing Eye-wear?

(0) Not equipped/not available

(1) No

(2) Eyeglasses/sunglasses

(3) Contact lenses

(4) Deployed, unknown if eyewear worn

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

## HEAD RESTRAINT AND SEAT EVALUATION

49. Head Restraint Type/Damage by Occupant  
at This Occupant Position

(0) No head restraints

(1) Integral—no damage

(2) Integral—damaged during accident

(3) Adjustable—no damage

(4) Adjustable—damaged during accident

(5) Add-on—no damage

(6) Add-on—damaged during accident

(8) Other (specify):

(9) Unknown

## 50. Seat Type (this Occupant Position)

(00) Occupant not seated or no seat

(01) Bucket

(02) Bucket with folding back

(03) Bench

(04) Bench with separate back cushions

(05) Bench with folding back(s)

(06) Split bench with separate back cushions

(07) Split bench with folding back(s)

(08) Pedestal (i.e., column supported)

(09) Box mounted seat (i.e., van type)

(10) Other seat type (specify):

(99) Unknown

## 51. Seat Orientation (this Occupant Position)

(0) Occupant not seated or no seat

(1) Forward facing seat

(2) Rear facing seat

(3) Side facing seat (inward)

(4) Side facing seat (outward)

(8) Other (specify):

(9) Unknown

## 52. Seat Track Adjusted Position Prior To Impact

(0) Occupant not seated or no seat

(1) Non-adjustable seat track

*Adjustable Seat Track*

(2) Seat at forward most track position

(3) Seat between forward most and middle track  
positions

(4) Seat at middle track position

(5) Seat between middle and rear most track  
positions

(6) Seat at rear most track position

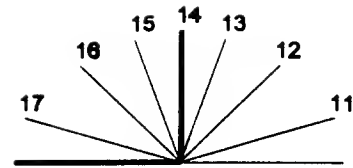
(9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 99

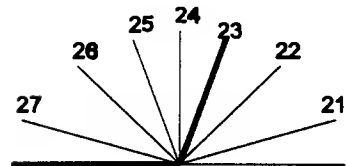
- (00) Occupant not seated or no seat  
 (01) Not adjustable

*Upright prior to impact*

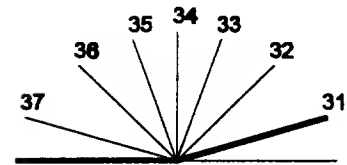
- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

*Slightly reclined prior to impact*

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position



- (99) Unknown

54. Seat Performance (this Occupant Position) 9

- (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed  
     (specify): \_\_\_\_\_  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment intrusion,  
     (specify): \_\_\_\_\_  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

## CHILD SAFETY SEAT

55. Child Safety Seat Make/Model

(000) No child safety seat

Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This  
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage

59. Child Safety Seat Shield Usage

60. Child Safety Seat Tether Usage

Note: Options below applicable to  
Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*(01) After market harness/shield/tether  
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
harness/shield/tether added(09) Unknown if harness/shield/tether  
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used



## INJURY CONSEQUENCES

## 61. Injury Severity (Police Rating)

3

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

## 62. Treatment - Mortality

3

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

## 63. Type Of Medical Facility (for Initial Treatment)

1

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

(9) Unknown

## 64. Hospital Stay

99

(00) Not Hospitalized

Code the number of days (up through 60) that the occupant stayed in hospital.

- (61) 61 days or more
- (99) Unknown

## 65. Working Days Lost

99

Code the number of days (up through 60) that the occupant lost from work due to the accident

- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

## 99. Case Occupant

0

- (0) Not the Case Occupant
- (1) This is the Case Occupant
- (2) This is the Case Occupant in another case.

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES****TRAUMA DATA**

## 66. Time to Death

\_\_\_\_\_ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

## 67. 1st Medically Reported Cause of Death

## 68. 2nd Medically Reported Cause of Death

## 69. 3rd Medically Reported Cause of Death

\_\_\_\_\_ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes  
(96) Mode of death given but specific injuries are not linked to cause of death. (specify): \_\_\_\_\_

- (97) Other result (includes fatal ruled disease) (specify): \_\_\_\_\_

- (99) Unknown

## 70. Number of Recorded Injuries for This Occupant

\_\_\_\_\_ Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

## 71. Glasgow Coma Scale (GCS) Score (at Medical Facility)

- (00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured

## 72. Was the Occupant Given Blood?

- (1) No - blood not given  
(2) Yes - blood given

(specify units): \_\_\_\_\_

- (9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub>

- (00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the HCO<sub>3</sub>  
(96) ABGs reported, HCO<sub>3</sub> unknown  
(97) Injured, details unknown  
(99) Unknown if injured

**BELT USE DETERMINATION**

## 74. Primary Source of Belt Use Determination

- (0) Not equipped/not available/destroyed or rendered inoperative

- (1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown if belt used



## OCCUPANT INJURY FORM

BEST AVAILABLE

Form Approved

O.M.B. No. 2127-00

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

3. Vehicle Number

01

2. Case Number - Stratum

DSI-95-SP-013

4. Occupant Number

01

## INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	Body Region	Type of Anatomic Structure	A.I.S. - 90			A.I.S. Severity	Aspect	Injury Source	Injury Confidence Level	Occupant Direct/ Indirect Injury	Area Intrusion Number	ICD-9
			Specific Anatomic Structure	Level of Injury								
1st	5. <u>2</u>	6. <u>1</u>	7. <u>6</u>	8. <u>08</u>	9. <u>02</u>	10. <u>3</u>	11. <u>0</u>	12. <u>697</u>	13. <u>9</u>	14. <u>7</u>	15. <u>00</u>	<u>850.5</u>
2nd	16. <u>2</u>	17. <u>9</u>	18. <u>1</u>	19. <u>92</u>	20. <u>02</u>	21. <u>3</u>	22. <u>0</u>	23. <u>601</u>	24. <u>1</u>	25. <u>3</u>	26. <u>00</u>	<u>986</u>
3rd	27. _____	28. _____	29. _____	30. _____	31. _____	32. _____	33. _____	34. _____	35. _____	36. _____	37. _____	_____
4th	38. _____	39. _____	40. _____	41. _____	42. _____	43. _____	44. _____	45. _____	46. _____	47. _____	48. _____	_____
5th	49. _____	50. _____	51. _____	52. _____	53. _____	54. _____	55. _____	56. _____	57. _____	58. _____	59. _____	_____
6th	60. _____	61. _____	62. _____	63. _____	64. _____	65. _____	66. _____	67. _____	68. _____	69. _____	70. _____	_____
7th	71. _____	72. _____	73. _____	74. _____	75. _____	76. _____	77. _____	78. _____	79. _____	80. _____	81. _____	_____
8th	82. _____	83. _____	84. _____	85. _____	86. _____	87. _____	88. _____	89. _____	90. _____	91. _____	92. _____	_____
9th	93. _____	94. _____	95. _____	96. _____	97. _____	98. _____	99. _____	100. _____	101. _____	102. _____	103. _____	_____
10th	104. _____	105. _____	106. _____	107. _____	108. _____	109. _____	110. _____	111. _____	112. _____	113. _____	114. _____	_____

## OCCUPANT INJURY CLASSIFICATION

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive	(1) Right
(2) Face		two-digit numbers beginning with 02.	(2) Left
(3) Neck	<u>Vessels, Nerves, Organs.</u>		(3) Bilateral
(4) Thorax	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(4) Central
(5) Abdomen		To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.	(5) Anterior
(6) Spine			(6) Posterior
(7) Upper Extremity			(7) Superior
(8) Lower Extremity	The exceptions to this rule apply to:		(8) Inferior
(9) Unspecified			(9) Unknown
			(0) Whole region
<b>Type of Anatomic Structure</b>	<u>Whole Area</u>	<b>Abbreviated Injury Scale</b>	
(1) Whole Area	(02) Skin - Abrasion	(1) Minor Injury	
(2) Vessels	(04) Skin - Contusion	(2) Moderate Injury	
(3) Nerves	(06) Skin - Laceration	(3) Serious Injury	
(4) Organs (includes Muscles/ligaments)	(08) Skin - Avulsion	(4) Severe Injury	
(5) Skeletal (includes joints)	(10) Amputation	(5) Critical Injury	
(6) Head - LOC	(20) Burn	(6) Maximum (untreatable)	
(9) Skin	(30) Crush	(7) Injured, unknown severity	
	(40) Degloving		
	(50) Injury - NFS		
	(90) Trauma, other than mechanical		
	<u>Head - LOC</u>		
	(02) Length of LOC		
	(04) Level		
	(06) of		
	(08) Consciousness		
	(10) Concussion		
	<u>Spine</u>		
	(02) Cervical		
	(04) Thoracic		
	(06) Lumbar		

## SOURCE OF INJURY DATA

## INJURY SOURCE

## DIRECT/INDIRECT INJURY

## CONFIDENCE LEVEL

OFFICIAL RECORDS

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL RECORDS

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): \_\_\_\_\_
- (9) Police

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source



# INJURY SOURCES

## FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (019) Other front object (specify): \_\_\_\_\_

## LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify): \_\_\_\_\_
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): \_\_\_\_\_

## RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests

- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): \_\_\_\_\_
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify): \_\_\_\_\_

## INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): \_\_\_\_\_
- (155) Head restraint system
- (160) Other occupants (specify): \_\_\_\_\_
- (161) Interior loose objects
- (162) Child safety seat (specify): \_\_\_\_\_
- (163) Other interior object (specify): \_\_\_\_\_

## AIR BAG

- (170) Air bag-driver side
- (171) Air bag-driver side and eyewear
- (172) Air bag-driver side and jewelry
- (173) Air bag-driver side and object held
- (174) Air bag-driver side and object in mouth
- (175) Air bag compartment cover-driver side
- (176) Air bag compartment cover-driver side and eyewear
- (177) Air bag compartment cover-driver side and jewelry
- (178) Air bag compartment cover-driver side and object held
- (179) Air bag compartment cover-driver side and object in mouth
- (180) Air bag-passenger side
- (181) Air bag-passenger side and eyewear
- (182) Air bag-passenger side and jewelry

- (183) Air bag-passenger side and object held
- (184) Air bag-passenger side and object in mouth
- (185) Air bag compartment cover-passenger side
- (186) Air bag compartment cover-passenger side and eyewear
- (187) Air bag compartment cover-passenger side and jewelry
- (188) Air bag compartment cover-passenger side and object held
- (189) Air bag compartment cover-passenger side and object in mouth
- (190) Other air bag (specify): \_\_\_\_\_
- (195) Other air bag compartment cover (specify): \_\_\_\_\_

## ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top

## FLOOR

- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

## REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): \_\_\_\_\_

## ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts, (specify): \_\_\_\_\_
- (409) Additional or relocated switches, (specify): \_\_\_\_\_

- (410) Raised roof

- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify): \_\_\_\_\_

## EXTERIOR of OCCUPANT'S VEHICLE

- (451) Hood
- (452) Outside hardware (e.g., outside mirror, antenna)
- (453) Other exterior surface or tires (specify): \_\_\_\_\_
- (454) Unknown exterior objects

## EXTERIOR OF OTHER MOTOR VEHICLE

- (501) Front bumper
- (502) Hood edge
- (503) Other front of vehicle (specify): \_\_\_\_\_
- (504) Hood
- (505) Hood ornament
- (506) Windshield, roof rail, A-pillar
- (507) Side surface
- (508) Side mirrors
- (509) Other side protrusions (specify): \_\_\_\_\_
- (510) Rear surface
- (511) Undercarriage
- (512) Tires and wheels
- (513) Other exterior of other motor vehicle (specify): \_\_\_\_\_
- (514) Unknown exterior of other motor vehicle

## OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

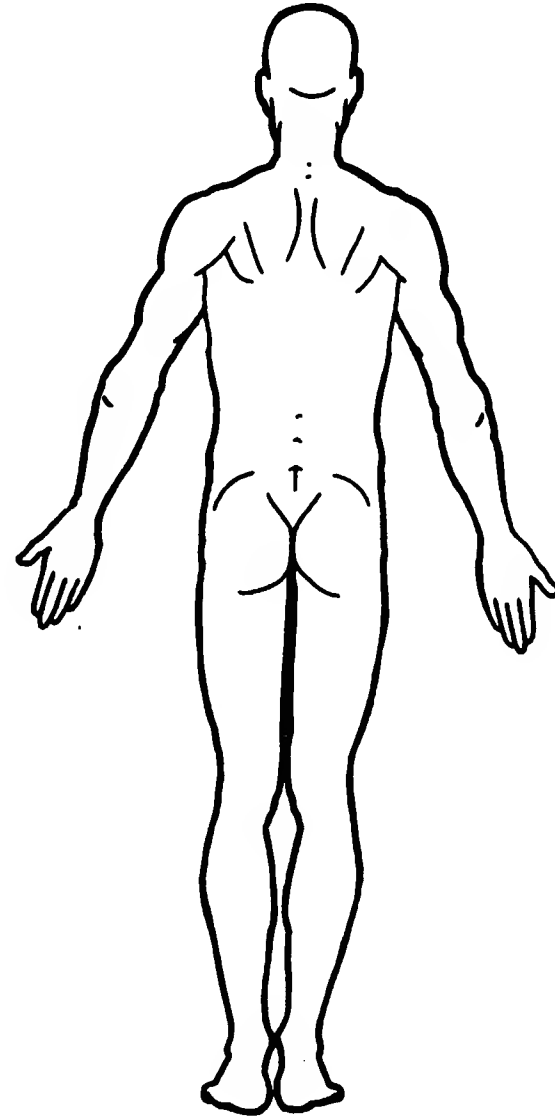
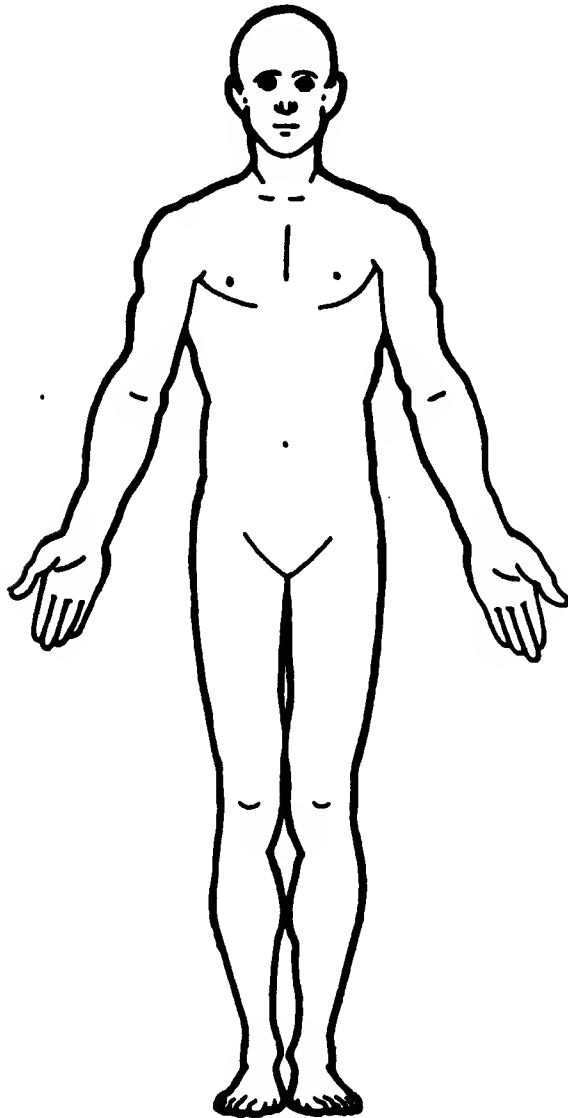
- (551) Ground
- (598) Other vehicle or object (specify): \_\_\_\_\_
- (599) Unknown vehicle or object

## NONCONTACT INJURY

- (601) Fire in vehicle
- (602) Flying glass
- (603) Other noncontact injury source (specify): \_\_\_\_\_
- (604) Air bag exhaust gases
- (697) Injured, unknown source

## OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



## OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

\_\_\_ No

\_\_\_ Yes

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

Blood Alcohol Level  
(mg/dl)

BAL = \_\_\_

Glasgow Coma  
Scale Score

GCSS = \_\_\_

Units of Blood  
Given

Units = \_\_\_

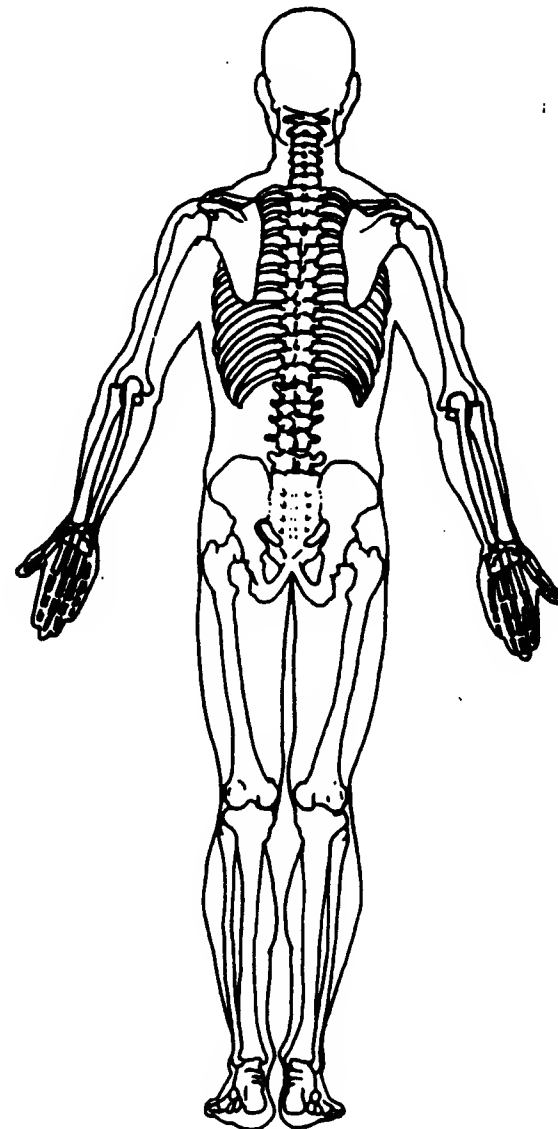
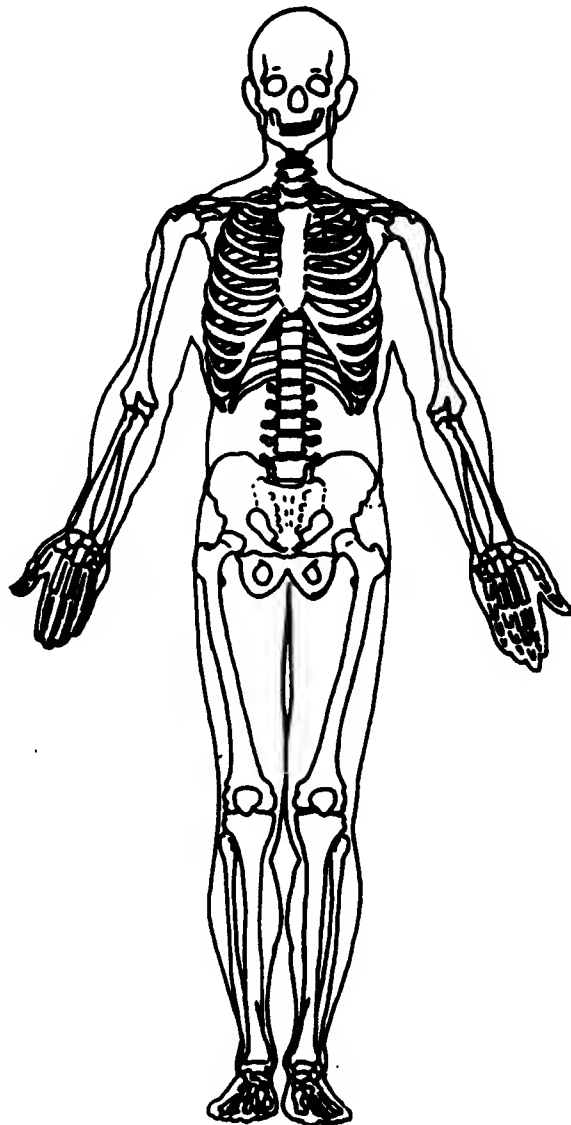
Arterial Blood Gases

pH = \_\_\_

PO<sub>2</sub> = \_\_\_

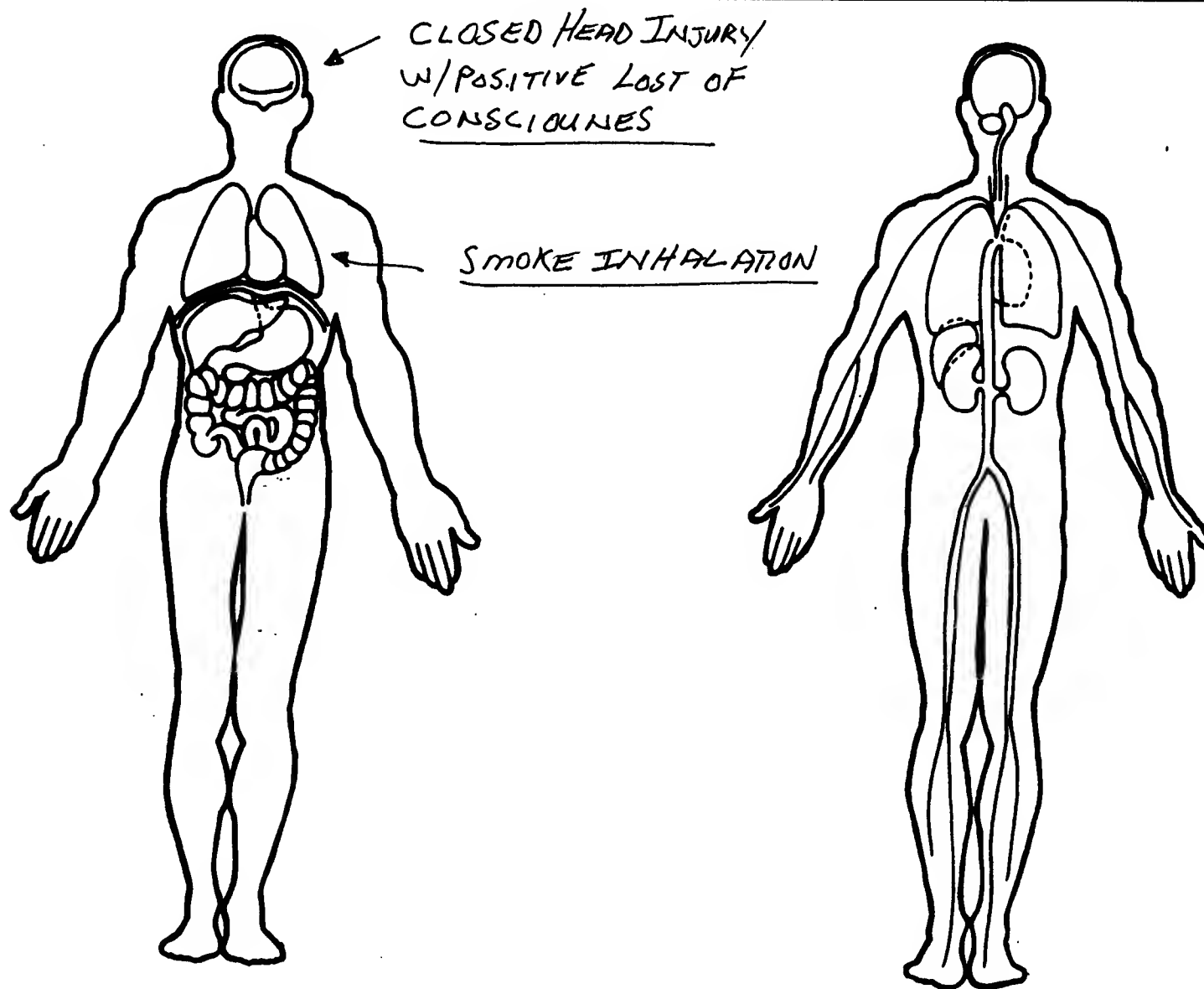
PCO<sub>2</sub> \_\_\_

HCO<sub>3</sub> \_\_\_



## OFFICIAL INJURY DATA —INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





National Highway Traffic Safety  
AdministrationNATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

4. Occupant Number

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

Code actual height to the nearest  
centimeter.

(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

8. Occupant's Weight

Code actual weight to the nearest  
kilogram.

(999) Unknown

\_\_\_\_\_ pounds X .4536 = \_\_\_\_\_ kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

## OCCUPANT'S SEATING

10. Occupant's Seat Position

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify): \_\_\_\_\_

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify): \_\_\_\_\_

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify): \_\_\_\_\_

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify): \_\_\_\_\_

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify): \_\_\_\_\_

(99) Unknown

11. Occupant's Posture

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front of  
seat

(8) Other abnormal posture (specify): \_\_\_\_\_

(9) Unknown

## EJECTION/ENTRAPMENT

12. Ejection φ

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area φ

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium φ

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) φ

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment φ

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_
- (9) Unknown

17. Occupant Mobility 2

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or disoriented
- (2) Removed from vehicle due to injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (9) Unknown

## BELT SYSTEM FUNCTION

18 Manual (Active) Belt System Availability 9

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown

19 Manual (Active) Belt System Use 9 9

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

(02) Shoulder belt

(03) Lap belt

(04) Lap and shoulder belt

(05) Belt used—type unknown

(08) Other belt used (specify):

(12) Shoulder belt used with child safety seat

(13) Lap belt used with child safety seat

(14) Lap and shoulder belt used with child safety seat

(15) Belt used with child safety seat—type unknown

(18) Other belt used with child safety seat (specify):

(99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 9

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of manual belt system (specify):

(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident 9

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

(6) Broken retractor

(7) Combination of above (specify):

(8) Other manual belt failure (specify):

(9) Unknown

22. Shoulder Belt Upper Anchorage Adjustment 9

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function ∅

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use ∅

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type ∅

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System ∅

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify):

- (8) Other improper use of automatic belt system (specify):
- (9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident ∅

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

(6) Broken retractor

(7) Combination of above (specify):

(8) Other automatic belt failure (specify):

(9) Unknown

## POLICE REPORTED RESTRAINT USE

28. Police Reported Belt Use 4

- (0) None used
- (1) Police did not indicate belt use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Automatic belt
- (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 1

- (0) No air bag available
- (1) Police did not indicate air bag availability/function
- (2) Deployed
- (3) Not deployed
- (4) Unknown if deployed
- (9) Police indicated "unknown"

## Check the Primary Source Used In Determining Belt Use.

- ☐ Not equipped/not available/destroyed or rendered inoperative
- ☐ Vehicle inspection
- ☐ Official injury data
- ☐ Driver/occupant interview
- ☐ Other (specify):

☒ Unknown if belt used

## AIR BAG SYSTEM FUNCTION

30. Frontal Air Bag System Ø

Availability/Function  
(This Occupant Position)

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
- (9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) Ø

- (0) Not equipped/not available
- (1) Deployed during accident (as a result of impact)
- (2) Deployed inadvertently just prior to accident
- (3) Deployed, details unknown
- (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (5) Unknown if deployed
- (7) Nondeployed
- (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) Ø

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
- (9) Unknown

*Specify type of "other" air bag present:*

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) Ø

- (0) Not equipped with an "other" air bag
- (1) Deployed during accident (as a result of impact)
- (2) Deployed inadvertently just prior to accident
- (3) Deployed, details unknown
- (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (5) Unknown if deployed
- (7) Nondeployed
- (9) Unknown

34. Are There Indications of Air Bag System Failure? (This Occupant Position) Ø

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):

(9) Unknown



## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? ☒   
 (0) Not equipped/not available   
 (1) No previous accidents   
 Yes   
 (2) Previous accident(s) without deployment(s)   
 (3) One previous accident with deployment   
 (4) More than one previous accident with at least one deployment   
 (8) Previous accidents, unknown deployment status   
 (9) Unknown
36. Type of Air Bag ☒   
 (0) Not equipped/not available   
 (1) Original manufacturer installed system   
 (2) Retrofitted air bag   
 (3) Replacement air bag   
 (8) Unknown type of air bag   
 (9) Unknown
37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? ☒   
 (0) Not equipped/not available   
 (1) No prior maintenance   
 (2) Yes, prior maintenance (specify): \_\_\_\_\_   
 (9) Unknown
38. Air Bag Deployment Accident Event Sequence Number ☒ ☒   
 (00) Not equipped/not available   
 \_\_\_\_\_ Code the accident event sequence number that initiated the air bag deployment   
 (96) Deployed, unknown event   
 (97) Not deployed   
 (98) Unknown if deployed   
 (99) Unknown
39. CDC For Air Bag Deployment Impact ☒   
 (0) Not equipped/not available   
 (1) Highest delta V   
 (2) Second highest delta V   
 (3) Other non-coded delta V (specify): \_\_\_\_\_   
 (6) Deployed, unknown event   
 (7) Not deployed   
 (8) Unknown if deployed   
 (9) Unknown
40. Longitudinal Component of Delta V For Air Bag Deployment Impact ☒ ☒ ☒   
 (-000) Not equipped/not available   
 Code the value of the delta V for the impact that initiated the air bag deployment   
 (-996) Deployment, unknown longitudinal Delta V   
 (-997) Not deployed   
 (-998) Unknown if deployed   
 (-999) Unknown
41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? ☒   
 (0) Not equipped/not available   
 (1) No   
 (2) Yes   
 (3) Deployed, unknown if flap(s) opened at designated tear points   
 (7) Not deployed   
 (8) Unknown if deployed   
 (9) Unknown
42. Were Air Bag Module Cover Flap(s) Damaged? ☒   
 (0) Not equipped/not available   
 (1) No   
 (2) Yes (specify): \_\_\_\_\_   
 (3) Deployed, unknown if air bag module cover flap(s) damaged   
 (7) Not deployed   
 (8) Unknown if deployed   
 (9) Unknown
43. Was There Damage To The Air Bag? ☒ ☒   
 (00) Not equipped/not available   
 (01) Not damaged   
 Yes - Air Bag Damage   
 (02) Ruptured   
 (03) Cut   
 (04) Torn   
 (05) Holed   
 (06) Burned   
 (07) Abraded   
 (88) Other damage (specify): \_\_\_\_\_   
 (95) Damaged, details unknown   
 (96) Deployed, unknown if damaged   
 (97) Not deployed   
 (98) Unknown if deployed   
 (99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION *continued*

44. Source of Air Bag Damage Ø Ø  
 (00) Not equipped/not available  
 (01) Not damaged  
 (02) Object worn by occupant, (specify):  
 \_\_\_\_\_  
 (03) Object carried by occupant, (specify):  
 \_\_\_\_\_  
 (04) Adaptive/assistive controls, (specify):  
 \_\_\_\_\_  
 (05) Fire in vehicle  
 (06) Thermal burns  
 (07) Rescue or emergency efforts  
 (88) Other damage source (specify):  
 \_\_\_\_\_  
 (95) Damaged, unknown source  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown
45. Was The Air Bag Tethered? Ø  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps):  
 \_\_\_\_\_  
 (3) Deployed, unknown if tethered  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
46. Did The Air Bag Have Vent Ports? Ø  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports):  
 \_\_\_\_\_  
 (3) Deployed, unknown if vent ports present  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? Ø  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 \_\_\_\_\_  
 (3) Deployed, unknown if other occupant contact to air bag  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? Ø  
 (0) Not equipped/not available  
 (1) No  
 (2) Eyeglasses/sunglasses  
 (3) Contact lenses  
 (4) Deployed, unknown if eyewear worn  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

## HEAD RESTRAINT AND SEAT EVALUATION

49. Head Restraint Type/Damage by Occupant at This Occupant Position 9  
 (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown
50. Seat Type (this Occupant Position) 9 9  
 (00) Occupant not seated or no seat  
 (01) Bucket  
 (02) Bucket with folding back  
 (03) Bench  
 (04) Bench with separate back cushions  
 (05) Bench with folding back(s)  
 (06) Split bench with separate back cushions  
 (07) Split bench with folding back(s)  
 (08) Pedestal (i.e., column supported)  
 (09) Box mounted seat (i.e., van type)  
 (10) Other seat type (specify):  
 \_\_\_\_\_  
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1  
 (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 9  
 (0) Occupant not seated or no seat  
 (1) Non-adjustable seat track  
 Adjustable Seat Track  
 (2) Seat at forward most track position  
 (3) Seat between forward most and middle track positions  
 (4) Seat at middle track position  
 (5) Seat between middle and rear most track positions  
 (6) Seat at rear most track position  
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 99

(00) Occupant not seated or no seat

(01) Not adjustable

*Upright prior to impact*

(11) Moved to completely rearward position

(12) Moved to rearward midrange position

(13) Moved to slightly rearward position

(14) Retained pre-impact position

(15) Moved to slightly forward position

(16) Moved to forward midrange position

(17) Moved to completely forward position

*Slightly reclined prior to impact*

(21) Moved to completely rearward position

(22) Moved to rearward midrange position

(23) Retained pre-impact position

(24) Moved to upright position

(25) Moved to slightly forward position

(26) Moved to forward midrange position

(27) Moved to completely forward position

*Completely reclined prior to impact*

(31) Retained pre-impact position

(32) Moved to rearward midrange position

(33) Moved to slightly rearward position

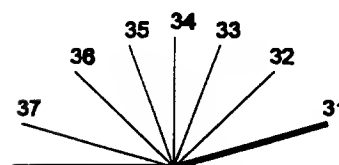
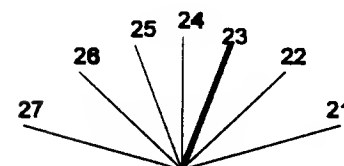
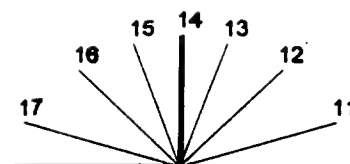
(34) Moved to upright position

(35) Moved to slightly forward position

(36) Moved to forward midrange position

(37) Moved to completely forward position

(99) Unknown

54. Seat Performance (this Occupant Position) 9

(0) Occupant not seated or no seat

(1) No seat performance failure(s)

(2) Seat adjusters failed

(3) Seat back folding locks or "seat back" failed  
(specify): \_\_\_\_\_

(4) Seat track/anchors failed

(5) Deformed by impact of occupant

(6) Deformed by passenger compartment intrusion,  
(specify): \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other (specify): \_\_\_\_\_

(9) Unknown

## CHILD SAFETY SEAT

55. Child Safety Seat Make/Model

(000) No child safety seat

Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This  
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage

59. Child Safety Seat Shield Usage

60. Child Safety Seat Tether Usage

Note: Options below applicable to  
Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*(01) After market harness/shield/tether  
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
harness/shield/tether added(09) Unknown if harness/shield/tether  
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used



**INJURY CONSEQUENCES**61. Injury Severity (Police Rating) 4

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality 1

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 1

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):
- (9) Unknown

64. Hospital Stay 99

- (00) Not Hospitalized
- Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

65. Working Days Lost 62

- Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

99. Case Occupant φ

- (0) Not the Case Occupant
- (1) This is the Case Occupant
- (2) This is the Case Occupant in another case.

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES****TRAUMA DATA**

66. Time to Death 9 9  
 \_\_\_\_\_ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)  
 (00) Not fatal  
 (96) Fatal - ruled disease  
 (99) Unknown

67. 1st Medically Reported Cause of Death 9 9

68. 2nd Medically Reported Cause of Death 9 9

69. 3rd Medically Reported Cause of Death 9 9  
 \_\_\_\_\_ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death  
 (00) Not fatal or no additional causes  
 (96) Mode of death given but specific injuries are not linked to cause of death. (specify):

- (97) Other result (includes fatal ruled disease) (specify): \_\_\_\_\_

- (99) Unknown \_\_\_\_\_

70. Number of Recorded Injuries for This Occupant 0 7  
 \_\_\_\_\_ Code the actual number of injuries recorded for this occupant.  
 (00) No recorded injuries  
 (97) Injured, details unknown  
 (99) Unknown if injured

71. Glasgow Coma Scale (GCS) Score 9 7  
 (at Medical Facility)  
 (00) Not injured  
 (01) Injured - not treated at medical facility  
 (02) No GCS Score at medical facility  
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
 (97) Injured, details unknown  
 (99) Unknown if injured

72. Was the Occupant Given Blood? 9  
 (1) No - blood not given  
 (2) Yes - blood given  
 (specify units): \_\_\_\_\_  
 (9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 9 7  
 (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the HCO<sub>3</sub>  
 (96) ABGs reported, HCO<sub>3</sub> unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

**BELT USE DETERMINATION**

74. Primary Source of Belt Use Determination 9  
 (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Vehicle inspection  
 (2) Official injury data  
 (3) Driver/occupant interview  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown if belt used



## OCCUPANT INJURY FORM

1. Primary Sampling Unit Number \_\_\_\_\_

3. Vehicle Number 012. Case Number - Stratum DS1-95-SP-0134. Occupant Number 02

## INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	A.I.S. - 90					Injury Source Confidence Level	Occupant Direct/ Indirect Injury	Area Intrusion Number	ICD-9			
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity							
1st	5. <u>2</u>	6. <u>8</u>	7. <u>9</u>	8. <u>20</u>	9. <u>12</u>	10. <u>2</u>	11. <u>3</u>	12. <u>601</u>	13. <u>1</u>	14. <u>3</u>	15. <u>00</u>	<u>948.1</u>
2nd	16. <u>2</u>	17. <u>5</u>	18. <u>9</u>	19. <u>08</u>	20. <u>00</u>	21. <u>1</u>	22. <u>1</u>	23. <u>697</u>	24. <u>9</u>	25. <u>7</u>	26. <u>00</u>	<u>877.4</u>
3rd	27. <u>2</u>	28. <u>8</u>	29. <u>5</u>	30. <u>18</u>	31. <u>00</u>	32. <u>3</u>	33. <u>1</u>	34. <u>012</u>	35. <u>2</u>	36. <u>2</u>	37. <u>99</u>	<u>820.8</u>
4th	38. <u>2</u>	39. <u>8</u>	40. <u>5</u>	41. <u>34</u>	42. <u>04</u>	43. <u>3</u>	44. <u>2</u>	45. <u>251</u>	46. <u>2</u>	47. <u>1</u>	48. <u>99</u>	<u>873.8</u>
5th	49. <u>2</u>	50. <u>8</u>	51. <u>5</u>	52. <u>16</u>	53. <u>05</u>	54. <u>3</u>	55. <u>2</u>	56. <u>251</u>	57. <u>2</u>	58. <u>1</u>	59. <u>99</u>	<u>823.8</u>
6th	60. <u>2</u>	61. <u>4</u>	62. <u>4</u>	63. <u>10</u>	64. <u>02</u>	65. <u>3</u>	66. <u>4</u>	67. <u>697</u>	68. <u>9</u>	69. <u>7</u>	70. <u>00</u>	<u>861.0</u>
7th	71. <u>2</u>	72. <u>9</u>	73. <u>1</u>	74. <u>92</u>	75. <u>04</u>	76. <u>4</u>	77. <u>0</u>	78. <u>601</u>	79. <u>1</u>	80. <u>3</u>	81. <u>00</u>	<u>986</u>
8th	82. _____	83. _____	84. _____	85. _____	86. _____	87. _____	88. _____	89. _____	90. _____	91. _____	92. _____	_____
9th	93. _____	94. _____	95. _____	96. _____	97. _____	98. _____	99. _____	100. _____	101. _____	102. _____	103. _____	_____
10th	104. _____	105. _____	106. _____	107. _____	108. _____	109. _____	110. _____	111. _____	112. _____	113. _____	114. _____	_____

## OCCUPANT INJURY CLASSIFICATION

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.	(1) Right
(2) Face			(2) Left
(3) Neck	<u>Vessels, Nerves, Organs.</u>		(3) Bilateral
(4) Thorax	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(4) Central
(5) Abdomen			(5) Anterior
(6) Spine		To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.	(6) Posterior
(7) Upper Extremity	The exceptions to this rule apply to:		(7) Superior
(8) Lower Extremity			(8) Inferior
(9) Unspecified			(9) Unknown
	<u>Whole Area</u>		(0) Whole region
<b>Type of Anatomic Structure</b>	(02) Skin - Abrasion		
	(04) Skin - Contusion		
	(06) Skin - Laceration		
(1) Whole Area	(08) Skin - Avulsion		
(2) Vessels	(10) Amputation		
(3) Nerves	(20) Burn		
(4) Organs (includes Muscles/ligaments)	(30) Crush		
(5) Skeletal (includes joints)	(40) Degloving		
(6) Head - LOC	(50) Injury - NFS		
(9) Skin	(90) Trauma, other than mechanical		
	<u>Head - LOC</u>		
	(02) Length of LOC		
	(04) Level of		
	(06) Consciousness		
	(08) Concussion		
	(10) Concussion		
	<u>Spine</u>		
	(02) Cervical		
	(04) Thoracic		
	(06) Lumbar		

## Abbreviated Injury Scale

- (1) Minor Injury  
 (2) Moderate Injury  
 (3) Serious Injury  
 (4) Severe Injury  
 (5) Critical Injury  
 (6) Maximum (untreatable)  
 (7) Injured, unknown severity

## SOURCE OF INJURY DATA

## INJURY SOURCE

## DIRECT/INDIRECT INJURY

OFFICIAL RECORDS

- (1) Autopsy records with or without hospital/medical records  
 (2) Hospital/medical records other than emergency room (e.g., discharge summary)  
 (3) Emergency room records only (including associated X-rays or other lab reports)  
 (4) Private physician, walk-in or emergency clinic

UNOFFICIAL RECORDS

- (5) Lay coroner report  
 (6) E.M.S. personnel  
 (7) Interviewee  
 (8) Other source (specify):  
 (9) Police

## CONFIDENCE LEVEL

- (1) Certain  
 (2) Probable  
 (3) Possible  
 (9) Unknown

- (1) Direct contact injury  
 (2) Indirect contact injury  
 (3) Noncontact injury  
 (7) Injured, unknown source



# INJURY SOURCES

## FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object (specify): \_\_\_\_\_

## LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify): \_\_\_\_\_
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): \_\_\_\_\_

## RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests

- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): \_\_\_\_\_
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify): \_\_\_\_\_

## INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): \_\_\_\_\_
- (155) Head restraint system
- (160) Other occupants (specify): \_\_\_\_\_
- (161) Interior loose objects
- (162) Child safety seat (specify): \_\_\_\_\_
- (163) Other interior object (specify): \_\_\_\_\_

## AIR BAG

- (170) Air bag-driver side
- (171) Air bag-driver side and eyewear
- (172) Air bag-driver side and jewelry
- (173) Air bag-driver side and object held
- (174) Air bag-driver side and object in mouth
- (175) Air bag compartment cover-driver side
- (176) Air bag compartment cover-driver side and eyewear
- (177) Air bag compartment cover-driver side and jewelry
- (178) Air bag compartment cover-driver side and object held
- (179) Air bag compartment cover-driver side and object in mouth
- (180) Air bag-passenger side
- (181) Air bag-passenger side and eyewear
- (182) Air bag-passenger side and jewelry

- (183) Air bag-passenger side and object held
- (184) Air bag-passenger side and object in mouth
- (185) Air bag compartment cover-passenger side
- (186) Air bag compartment cover-passenger side and eyewear
- (187) Air bag compartment cover-passenger side and jewelry
- (188) Air bag compartment cover-passenger side and object held
- (189) Air bag compartment cover-passenger side and object in mouth
- (190) Other air bag (specify): \_\_\_\_\_
- (195) Other air bag compartment cover (specify): \_\_\_\_\_

## ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top

## FLOOR

- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

## REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): \_\_\_\_\_

## ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts, (specify): \_\_\_\_\_
- (409) Additional or relocated switches, (specify): \_\_\_\_\_

- (410) Raised roof

- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify): \_\_\_\_\_

## EXTERIOR of OCCUPANT'S VEHICLE

- (451) Hood
- (452) Outside hardware (e.g., outside mirror, antenna)
- (453) Other exterior surface or tires (specify): \_\_\_\_\_
- (454) Unknown exterior objects

## EXTERIOR OF OTHER MOTOR VEHICLE

- (501) Front bumper
- (502) Hood edge
- (503) Other front of vehicle (specify): \_\_\_\_\_
- (504) Hood
- (505) Hood ornament
- (506) Windshield, roof rail, A-pillar
- (507) Side surface
- (508) Side mirrors
- (509) Other side protrusions (specify): \_\_\_\_\_
- (510) Rear surface
- (511) Undercarriage
- (512) Tires and wheels
- (513) Other exterior of other motor vehicle (specify): \_\_\_\_\_
- (514) Unknown exterior of other motor vehicle

## OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

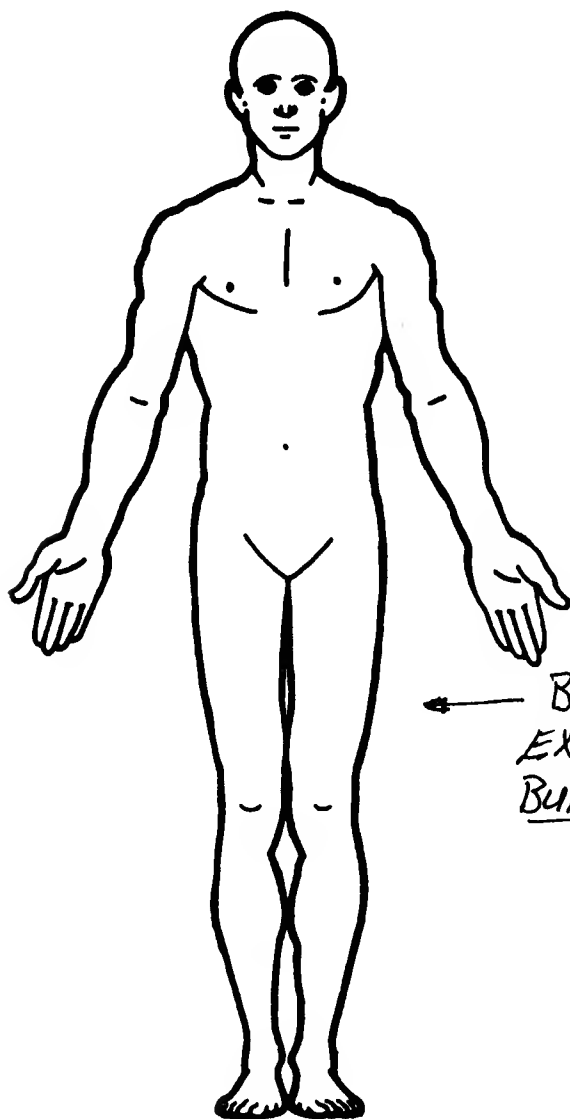
- (551) Ground
- (598) Other vehicle or object (specify): \_\_\_\_\_
- (599) Unknown vehicle or object

## NONCONTACT INJURY

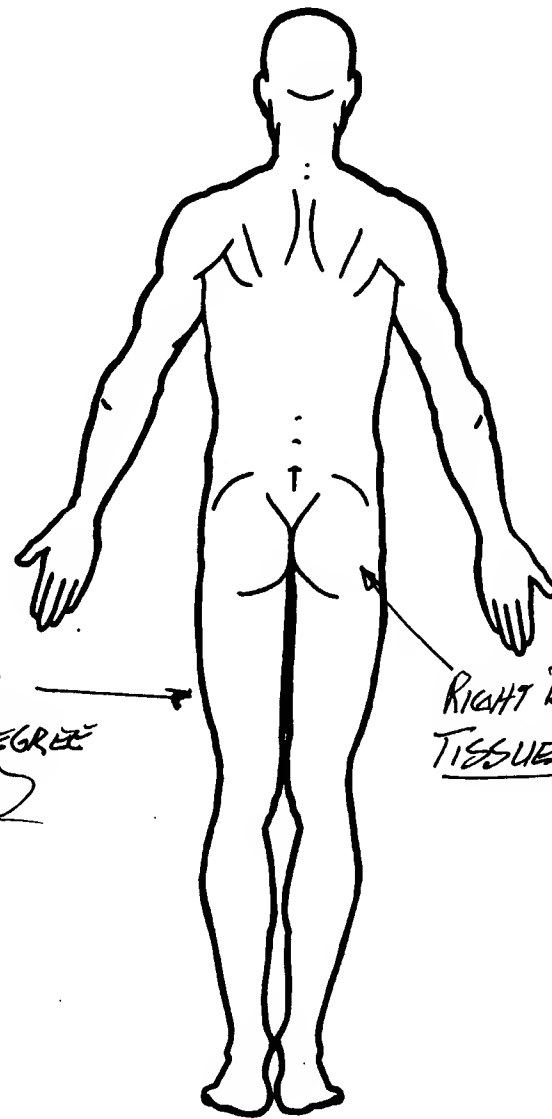
- (601) Fire in vehicle
- (602) Flying glass
- (603) Other noncontact injury source (specify): \_\_\_\_\_
- (604) Air bag exhaust gases
- (697) Injured, unknown source

## OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



← BILATERAL LOWER  
EXTREMITY THIRD DEGREE  
BURNS (ABOUT 10%) →



RIGHT BUTTOCK  
TISSUE AVULSION

## OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

\_\_\_ No

\_\_\_ Yes

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

Blood Alcohol Level  
(mg/dl)

BAL = \_\_\_

Glasgow Coma  
Scale Score

GCSS = \_\_\_

Units of Blood  
Given

Units = \_\_\_

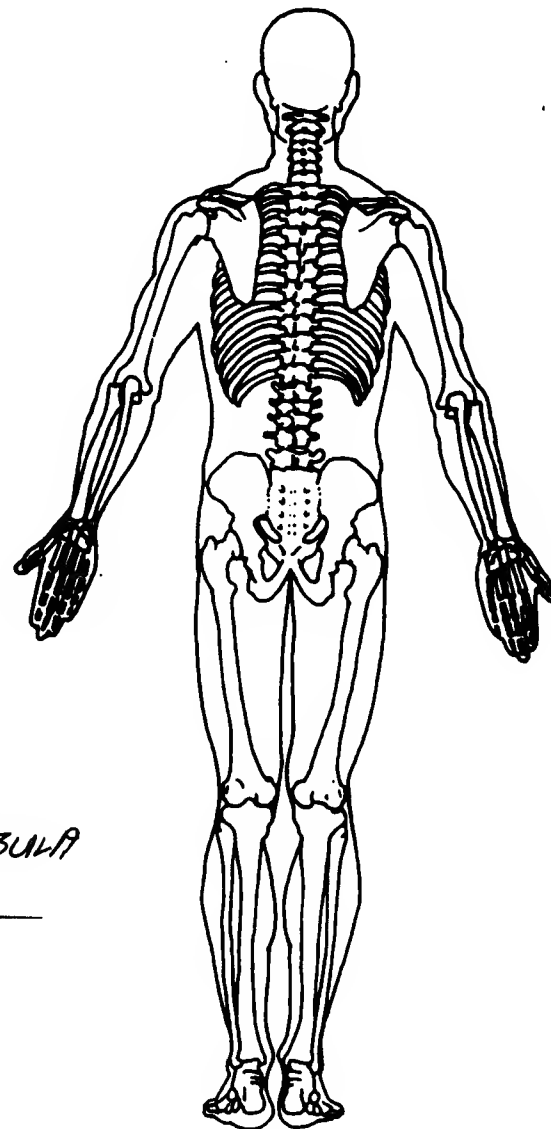
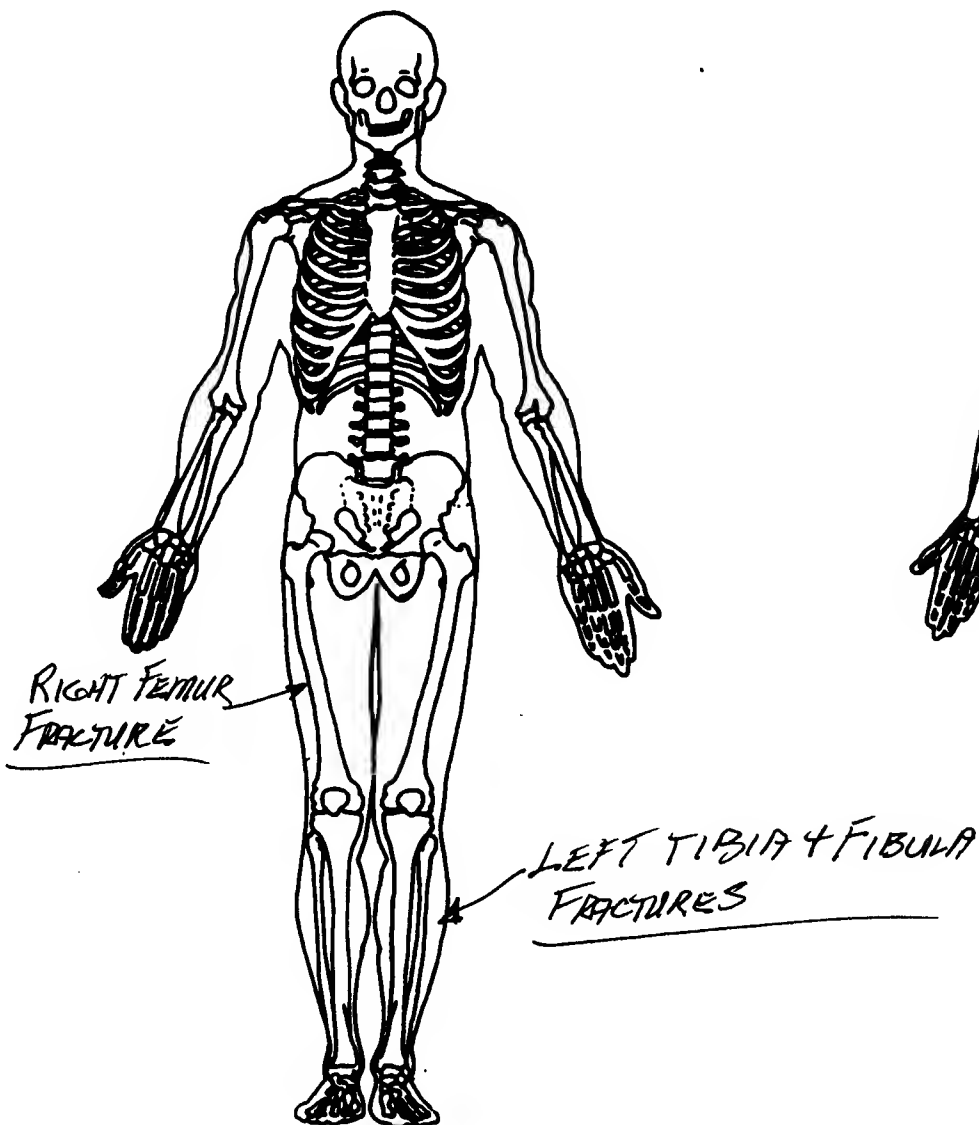
Arterial Blood Gases

pH = \_\_\_

PO<sub>2</sub> = \_\_\_

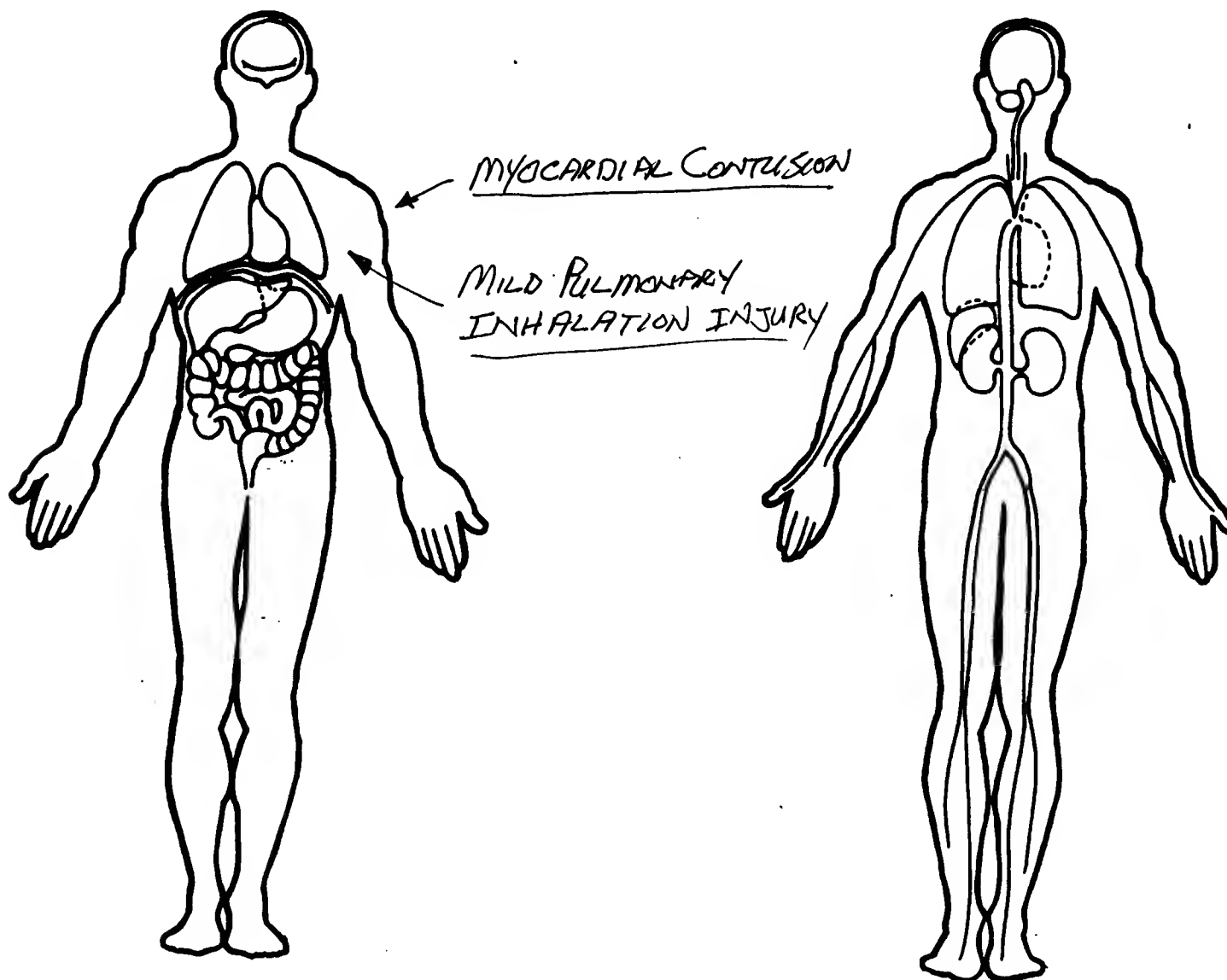
PCO<sub>2</sub> \_\_\_

HCO<sub>3</sub> \_\_\_



## OFFICIAL INJURY DATA —INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





National Highway Traffic Safety  
AdministrationNATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

DS1-95-SP-013

3. Vehicle Number

01

4. Occupant Number

03

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

72

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

2

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

999Code actual height to the nearest  
centimeter.

(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

8. Occupant's Weight

999Code actual weight to the nearest  
kilogram.

(999) Unknown

\_\_\_\_\_ pounds X .4536 = \_\_\_\_\_ kilograms

9. Occupant's Role

2

(1) Driver

(2) Passenger

(9) Unknown

## OCCUPANT'S SEATING

10. Occupant's Seat Position

99

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify): \_\_\_\_\_

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify): \_\_\_\_\_

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify): \_\_\_\_\_

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify): \_\_\_\_\_

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify): \_\_\_\_\_

(99) Unknown

11. Occupant's Posture

9

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front of  
seat

(8) Other abnormal posture (specify): \_\_\_\_\_

(9) Unknown

## EJECTION/ENTRAPMENT

12. Ejection  $\phi$ 

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area  $\phi$ 

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium  $\phi$ 

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact)  $\phi$ 

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 2

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): FIRE

\_\_\_\_\_  
(9) Unknown

17. Occupant Mobility  $\phi$ 

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or disoriented
- (2) Removed from vehicle due to injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (9) Unknown

## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 9
- (0) None available
  - (1) Belt removed/destroyed
  - (2) Shoulder belt
  - (3) Lap belt
  - (4) Lap and shoulder belt
  - (5) Belt available—type unknown
- Integral Belt Partially Destroyed*
- (6) Shoulder belt (lap belt destroyed/removed)
  - (7) Lap belt (shoulder belt destroyed/removed)
  - (8) Other belt (specify): \_\_\_\_\_
  - (9) Unknown
19. Manual (Active) Belt System Use 9 9
- (00) None used, not available, or belt removed/destroyed
  - (01) Inoperative (specify): \_\_\_\_\_
  - (02) Shoulder belt
  - (03) Lap belt
  - (04) Lap and shoulder belt
  - (05) Belt used—type unknown
  - (08) Other belt used (specify): \_\_\_\_\_
  - (12) Shoulder belt used with child safety seat
  - (13) Lap belt used with child safety seat
  - (14) Lap and shoulder belt used with child safety seat
  - (15) Belt used with child safety seat—type unknown
  - (18) Other belt used with child safety seat (specify): \_\_\_\_\_
  - (99) Unknown if belt used
20. Proper Use of Manual (Active) Belts 9
- (0) None used or not available
  - (1) Belt used properly
  - (2) Belt used properly with child safety seat
- Belt Used Improperly*
- (3) Shoulder belt worn under arm
  - (4) Shoulder belt worn behind back or seat
  - (5) Belt worn around more than one person
  - (6) Lap belt worn on abdomen
  - (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_
  - (8) Other improper use of manual belt system (specify): \_\_\_\_\_
  - (9) Unknown
21. Manual (Active) Belt Failure Modes During Accident 9
- (0) No manual belt used or not available
  - (1) No manual belt failure(s)
  - (2) Torn webbing (stretched webbing not included)
  - (3) Broken buckle or latchplate
  - (4) Upper anchorage separated
  - (5) Other anchorage separated (specify): \_\_\_\_\_
  - (6) Broken retractor
  - (7) Combination of above (specify): \_\_\_\_\_
  - (8) Other manual belt failure (specify): \_\_\_\_\_
  - (9) Unknown
22. Shoulder Belt Upper Anchorage Adjustment 9
- (0) No shoulder belt
  - (1) No upper anchorage adjustment for shoulder belt
- Adjustable shoulder Belt Upper Anchorage*
- (2) In full up position
  - (3) In mid position
  - (4) In full down position
  - (5) Position unknown
  - (9) Unknown if position has adjustable upper anchorage adjustment
23. Automatic (Passive) Belt System Availability/Function Ø
- (0) Not equipped/not available
  - (1) 2 point automatic belts
  - (2) 3 point automatic belts
  - (3) Automatic belts - type unknown
- Non-functional*
- (4) Automatic belts destroyed or rendered inoperative
  - (9) Unknown
24. Automatic (Passive) Belt System Use Ø
- (0) Not equipped/not available/destroyed or rendered inoperative
  - (1) Automatic belt in use
  - (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): \_\_\_\_\_
  - (3) Automatic belt use unknown
  - (9) Unknown
25. Automatic (Passive) Belt System Type Ø
- (0) Not equipped/not available
  - (1) Non-motorized system
  - (2) Motorized system
  - (9) Unknown
26. Proper Use of Automatic (Passive) Belt System Ø
- (0) Not equipped/not available/not used
  - (1) Automatic belt used properly
  - (2) Automatic belt used properly with child safety seat
- Automatic Belt Used Improperly*
- (3) Automatic shoulder belt worn under arm
  - (4) Automatic shoulder belt worn behind back
  - (5) Automatic belt worn around more than one person
  - (6) Lap portion of automatic belt worn on abdomen
  - (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_
  - (8) Other improper use of automatic belt system (specify): \_\_\_\_\_
  - (9) Unknown
27. Automatic (Passive) Belt Failure Modes During Accident Ø
- (0) Not equipped/not available/not in use
  - (1) No automatic belt failure(s)
  - (2) Torn webbing (stretched webbing not included)
  - (3) Broken buckle or latchplate
  - (4) Upper anchorage separated
  - (5) Other anchorage separated (specify): \_\_\_\_\_
  - (6) Broken retractor
  - (7) Combination of above (specify): \_\_\_\_\_
  - (8) Other automatic belt failure (specify): \_\_\_\_\_
  - (9) Unknown

## POLICE REPORTED RESTRAINT USE

## 28. Police Reported Belt Use

- (0) None used  
 (1) Police did not indicate belt use  
 (2) Shoulder belt  
 (3) Lap belt  
 (4) Lap and shoulder belt  
 (5) Belt used, type not specified  
 (6) Child safety seat  
 (7) Automatic belt  
 (8) Other type belt, (specify):

(9) Police indicated "unknown"

## 29. Police Reported Air Bag Availability/Function

- (0) No air bag available  
 (1) Police did not indicate air bag availability/function  
 (2) Deployed  
 (3) Not deployed  
 (4) Unknown if deployed  
 (9) Police indicated "unknown"

## Check the Primary Source Used In Determining Belt Use.

- [ ] Not equipped/not available/destroyed or rendered inoperative  
 [ ] Vehicle inspection  
 [ ] Official injury data  
 [ ] Driver/occupant interview  
 [ ] Other (specify):

[X] Unknown if belt used

## AIR BAG SYSTEM FUNCTION

## 30. Frontal Air Bag System Availability/Function (This Occupant Position)

- (0) Not equipped/not available  
 (1) Air bag

## Non-functional

- (2) Air bag disconnected (specify):

- (3) Air bag not reinstalled  
 (9) Unknown

## 31. Frontal Air Bag System Deployment (This Occupant Position)

- (0) Not equipped/not available  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

## 32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position)

- (0) Not equipped/not available  
 (1) Air bag

## Non-functional

- (2) Air bag disconnected (specify):

- (3) Air bag not reinstalled  
 (9) Unknown

Specify type of "other" air bag present:

## 33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position)

- (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

## 34. Are There Indications of Air Bag System Failure? (This Occupant Position)

- (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):

(9) Unknown



## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)?  $\phi$ 

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag  $\phi$ 

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System?  $\phi$ 

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify): \_\_\_\_\_  
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number  $\phi\phi$ 

- (00) Not equipped/not available  
\_\_\_\_\_ Code the accident event sequence number that initiated the air bag deployment  
(96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact  $\phi$ 

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify): \_\_\_\_\_  
(6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact  $\phi\phi\phi$ 

- (-000) Not equipped/not available  
Code the value of the delta V for the impact that initiated the air bag deployment  
(-996) Deployment, unknown longitudinal Delta V  
(-997) Not deployed  
(-998) Unknown if deployed  
(-999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?  $\phi$ 

- (0) Not equipped/not available  
(1) No  
(2) Yes  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged?  $\phi$ 

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify): \_\_\_\_\_  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag?  $\phi\phi$ 

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify): \_\_\_\_\_

- (95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION *continued*

## HEAD RESTRAINT AND SEAT EVALUATION

## 44. Source of Air Bag Damage

- (00) Not equipped/not available  
 (01) Not damaged  
 (02) Object worn by occupant, (specify):  
 \_\_\_\_\_  
 (03) Object carried by occupant, (specify):  
 \_\_\_\_\_  
 (04) Adaptive/assistive controls, (specify):  
 \_\_\_\_\_  
 (05) Fire in vehicle  
 (06) Thermal burns  
 (07) Rescue or emergency efforts  
 (08) Other damage source (specify):  
 \_\_\_\_\_  
 (95) Damaged, unknown source  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown

## 45. Was The Air Bag Tethered?

- (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps):  
 \_\_\_\_\_  
 (3) Deployed, unknown if tethered  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

## 46. Did The Air Bag Have Vent Ports?

- (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports):  
 \_\_\_\_\_  
 (3) Deployed, unknown if vent ports present  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

## 47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

- (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 \_\_\_\_\_  
 (3) Deployed, unknown if other occupant contact to air bag  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

## 48. Was This Occupant Wearing Eye-wear?

- (0) Not equipped/not available  
 (1) No  
 (2) Eyeglasses/sunglasses  
 (3) Contact lenses  
 (4) Deployed, unknown if eyewear worn  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

## 49. Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown

## 50. Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat  
 (01) Bucket  
 (02) Bucket with folding back  
 (03) Bench  
 (04) Bench with separate back cushions  
 (05) Bench with folding back(s)  
 (06) Split bench with separate back cushions  
 (07) Split bench with folding back(s)  
 (08) Pedestal (i.e., column supported)  
 (09) Box mounted seat (i.e., van type)  
 (10) Other seat type (specify):  
 \_\_\_\_\_  
 (99) Unknown

## 51. Seat Orientation (this Occupant Position)

- (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown

## 52. Seat Track Adjusted Position Prior To Impact

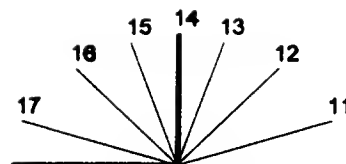
- (0) Occupant not seated or no seat  
 (1) Non-adjustable seat track  
 Adjustable Seat Track  
 (2) Seat at forward most track position  
 (3) Seat between forward most and middle track positions  
 (4) Seat at middle track position  
 (5) Seat between middle and rear most track positions  
 (6) Seat at rear most track position  
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 01

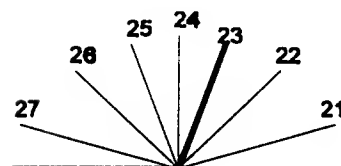
- (00) Occupant not seated or no seat  
 (01) Not adjustable

*Upright prior to impact*

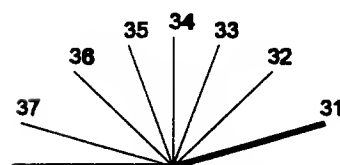
- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

*Slightly reclined prior to impact*

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position



(99) Unknown

54. Seat Performance (this Occupant Position) 9

- (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed  
     (specify): \_\_\_\_\_  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment intrusion,  
     (specify): \_\_\_\_\_  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

## CHILD SAFETY SEAT

55. Child Safety Seat Make/Model φ φ φ

(000) No child safety seat

Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):  
\_\_\_\_\_

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat φ

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):  
\_\_\_\_\_

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation φ φ

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):  
\_\_\_\_\_

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):  
\_\_\_\_\_

(19) Unknown orientation

*Unknown Design or Orientation For This  
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):  
\_\_\_\_\_

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage φ φ59. Child Safety Seat Shield Usage φ φ60. Child Safety Seat Tether Usage φ φNote: Options below applicable to  
Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*(01) After market harness/shield/tether  
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
harness/shield/tether added(09) Unknown if harness/shield/tether  
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used



**INJURY CONSEQUENCES****61. Injury Severity (Police Rating)**4

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

**62. Treatment - Mortality**1

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

**63. Type Of Medical Facility (for Initial Treatment)**0

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):
- (9) Unknown

**64. Hospital Stay**0 0

- (00) Not Hospitalized
- Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

**65. Working Days Lost**6 2

- Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**99. Case Occupant**0

- (0) Not the Case Occupant
- (1) This is the Case Occupant
- (2) This is the Case Occupant in another case.

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES****TRAUMA DATA**66. Time to Death 01

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

67. 1st Medically Reported Cause of Death 9968. 2nd Medically Reported Cause of Death 9969. 3rd Medically Reported Cause of Death 99  
Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes  
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

70. Number of Recorded Injuries for This Occupant 97

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

71. Glasgow Coma Scale (GCS) Score (at Medical Facility) 01

- (00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured

72. Was the Occupant Given Blood? 1

- (1) No - blood not given  
(2) Yes - blood given (specify units):  
(9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 01

- (00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the HCO<sub>3</sub>  
(96) ABGs reported, HCO<sub>3</sub> unknown  
(97) Injured, details unknown  
(99) Unknown if injured

**BELT USE DETERMINATION**74. Primary Source of Belt Use Determination 9

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify):  
(9) Unknown if belt used

National Highway Traffic Safety  
AdministrationNATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

4. Occupant Number

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

Code actual height to the nearest  
centimeter.

(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

8. Occupant's Weight

Code actual weight to the nearest  
kilogram.

(999) Unknown

\_\_\_\_\_ pounds X .4536 = \_\_\_\_\_ kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

## OCCUPANT'S SEATING

10. Occupant's Seat Position

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify): \_\_\_\_\_

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify): \_\_\_\_\_

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify): \_\_\_\_\_

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify): \_\_\_\_\_

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify): \_\_\_\_\_

(99) Unknown

11. Occupant's Posture

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front of  
seat

(8) Other abnormal posture (specify): \_\_\_\_\_

(9) Unknown

## EJECTION/ENTRAPMENT

12. Ejection Ø

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area Ø

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium Ø

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) Ø

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 2

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): FIRE

\_\_\_\_\_  
(9) Unknown

17. Occupant Mobility Ø

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or disoriented
- (2) Removed from vehicle due to injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (9) Unknown



## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 9

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown

19. Manual (Active) Belt System Use 9 9

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 9

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of manual belt system (specify):

(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident 9

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):

(8) Other manual belt failure (specify):

(9) Unknown

22. Shoulder Belt Upper Anchorage Adjustment 9

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function Ø

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use Ø

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type Ø

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System Ø

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify):

- (8) Other improper use of automatic belt system (specify):
- (9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident Ø

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other automatic belt failure (specify):

(9) Unknown

## POLICE REPORTED RESTRAINT USE

## 28. Police Reported Belt Use

- (0) None used  
 (1) Police did not indicate belt use  
 (2) Shoulder belt  
 (3) Lap belt  
 (4) Lap and shoulder belt  
 (5) Belt used, type not specified  
 (6) Child safety seat  
 (7) Automatic belt  
 (8) Other type belt, (specify):

(9) Police indicated "unknown"

## 29. Police Reported Air Bag Availability/Function

- (0) No air bag available  
 (1) Police did not indicate air bag availability/function  
 (2) Deployed  
 (3) Not deployed  
 (4) Unknown if deployed  
 (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- [ ] Not equipped/not available/destroyed or rendered inoperative  
 [ ] Vehicle inspection  
 [ ] Official injury data  
 [ ] Driver/occupant interview  
 [ ] Other (specify):

☒ Unknown if belt used

## AIR BAG SYSTEM FUNCTION

## 30. Frontal Air Bag System

Availability/Function

(This Occupant Position)

- (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled  
 (9) Unknown

## 31. Frontal Air Bag System Deployment

(This Occupant Position)

- (0) Not equipped/not available  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

## 32. Other Than First Seat Frontal Air Bag

Availability/Function

(This Occupant Position)

- (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled  
 (9) Unknown

*Specify type of "other" air bag present:*

## 33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position)

- (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

## 34. Are There Indications of Air Bag System Failure?

(This Occupant Position)

- (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):

(9) Unknown

## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? Ø

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag Ø

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? Ø

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify): \_\_\_\_\_  
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number Ø Ø

- (00) Not equipped/not available  
\_\_\_\_\_ Code the accident event sequence number that initiated the air bag deployment  
(96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact Ø

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify): \_\_\_\_\_  
(6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact + Ø Ø Ø  
-

- (-000) Not equipped/not available  
Code the value of the delta V for the impact that initiated the air bag deployment  
(-996) Deployment, unknown longitudinal Delta V  
(-997) Not deployed  
(-998) Unknown if deployed  
(-999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? Ø

- (0) Not equipped/not available  
(1) No  
(2) Yes  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? Ø

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify): \_\_\_\_\_  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag? Ø Ø

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify): \_\_\_\_\_

- (95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION *continued*

44. Source of Air Bag Damage 40  
 (00) Not equipped/not available  
 (01) Not damaged  
 (02) Object worn by occupant, (specify):  
 \_\_\_\_\_  
 (03) Object carried by occupant, (specify):  
 \_\_\_\_\_  
 (04) Adaptive/assistive controls, (specify):  
 \_\_\_\_\_  
 (05) Fire in vehicle  
 (06) Thermal burns  
 (07) Rescue or emergency efforts  
 (08) Other damage source (specify):  
 \_\_\_\_\_  
 (95) Damaged, unknown source  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown
45. Was The Air Bag Tethered? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps):  
 \_\_\_\_\_  
 (3) Deployed, unknown if tethered  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports):  
 \_\_\_\_\_  
 (3) Deployed, unknown if vent ports present  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
47. Was the Air Bag in this Occupant's Position  
 Contacted by Another Occupant? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 \_\_\_\_\_  
 (3) Deployed, unknown if other occupant contact to  
 air bag  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Eyeglasses/sunglasses  
 (3) Contact lenses  
 (4) Deployed, unknown if eyewear worn  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

## HEAD RESTRAINT AND SEAT EVALUATION

49. Head Restraint Type/Damage by Occupant at This Occupant Position 9  
 (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown
50. Seat Type (this Occupant Position) 99  
 (00) Occupant not seated or no seat  
 (01) Bucket  
 (02) Bucket with folding back  
 (03) Bench  
 (04) Bench with separate back cushions  
 (05) Bench with folding back(s)  
 (06) Split bench with separate back cushions  
 (07) Split bench with folding back(s)  
 (08) Pedestal (i.e., column supported)  
 (09) Box mounted seat (i.e., van type)  
 (10) Other seat type (specify):  
 \_\_\_\_\_  
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1  
 (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 1  
 (0) Occupant not seated or no seat  
 (1) Non-adjustable seat track  
 Adjustable Seat Track  
 (2) Seat at forward most track position  
 (3) Seat between forward most and middle track  
 positions  
 (4) Seat at middle track position  
 (5) Seat between middle and rear most track  
 positions  
 (6) Seat at rear most track position  
 (9) Unknown

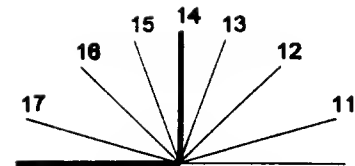


HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 01

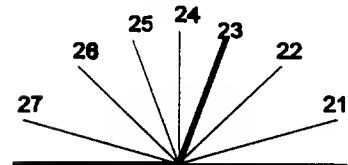
- (00) Occupant not seated or no seat  
 (01) Not adjustable

*Upright prior to impact*

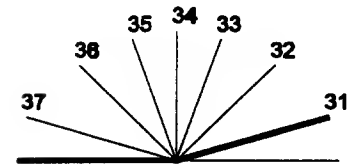
- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

*Slightly reclined prior to impact*

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position



(99) Unknown

54. Seat Performance (this Occupant Position) 9

- (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed  
     (specify): \_\_\_\_\_  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment intrusion,  
     (specify): \_\_\_\_\_  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

## CHILD SAFETY SEAT

55. Child Safety Seat Make/Model

(000) No child safety seat

Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This  
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage

59. Child Safety Seat Shield Usage

60. Child Safety Seat Tether Usage

Note: Options below applicable to  
Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*(01) After market harness/shield/tether  
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
harness/shield/tether added(09) Unknown if harness/shield/tether  
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES****61. Injury Severity (Police Rating)**

- (0) O - No injury  
 (1) C - Possible injury  
 (2) B - Nonincapacitating injury  
 (3) A - Incapacitating injury  
 (4) K - Killed  
 (5) U - Injury, severity unknown  
 (6) Died prior to accident  
 (9) Unknown

**62. Treatment - Mortality**

- (0) No treatment  
 (1) Fatal  
 (2) Fatal - ruled disease (specify):  
 \_\_\_\_\_

**Nonfatal**

- (3) Hospitalization  
 (4) Transported and released  
 (5) Treatment at scene - nontransported  
 (6) Treatment later  
 (7) Treatment - other (specify):  
 \_\_\_\_\_

- (8) Transported to a medical facility-unknown if treated  
 (9) Unknown

**63. Type Of Medical Facility (for Initial Treatment)**

- (0) Not treated at a medical facility  
 (1) Trauma center  
 (2) Hospital  
 (3) Medical clinic  
 (4) Physician's office  
 (5) Treatment later at medical facility  
 (8) Other (specify):  
 \_\_\_\_\_

- (9) Unknown

**64. Hospital Stay**

- (00) Not Hospitalized  
 \_\_\_\_\_ Code the number of days (up through 60) that the occupant stayed in hospital.  
 (61) 61 days or more  
 (99) Unknown

**65. Working Days Lost**

- \_\_\_\_\_ Code the number of days (up through 60) that the occupant lost from work due to the accident  
 (00) No working days lost  
 (61) 61 days or more  
 (62) Fatally injured  
 (97) Not working prior to accident  
 (99) Unknown

**99. Case Occupant**

- (0) Not the Case Occupant  
 (1) This is the Case Occupant  
 (2) This is the Case Occupant in another case.

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES****TRAUMA DATA**66. Time to Death Ø 1

\_\_\_\_\_ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

67. 1st Medically Reported Cause of Death 9 968. 2nd Medically Reported Cause of Death 9 969. 3rd Medically Reported Cause of Death 9 9

\_\_\_\_\_ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes  
(96) Mode of death given but specific injuries are not linked to cause of death. (specify): \_\_\_\_\_

(97) Other result (includes fatal ruled disease) (specify): \_\_\_\_\_

(99) Unknown

70. Number of Recorded Injuries for This Occupant 9 7

\_\_\_\_\_ Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

71. Glasgow Coma Scale (GCS) Score (at Medical Facility) Ø 1

- (00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured

72. Was the Occupant Given Blood? 1

- (1) No - blood not given  
(2) Yes - blood given  
(specify units): \_\_\_\_\_  
(9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub> Ø 1

- (00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the HCO<sub>3</sub>  
(96) ABGs reported, HCO<sub>3</sub> unknown  
(97) Injured, details unknown  
(99) Unknown if injured

**BELT USE DETERMINATION**74. Primary Source of Belt Use Determination 9

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown if belt used



National Highway Traffic Safety  
AdministrationNATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

DS1-95-SP-013

3. Vehicle Number

01

4. Occupant Number

05

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

Code actual height to the nearest  
centimeter.

(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

8. Occupant's Weight

Code actual weight to the nearest  
kilogram.

(999) Unknown

\_\_\_\_\_ pounds X .4536 = \_\_\_\_\_ kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

## OCCUPANT'S SEATING

10. Occupant's Seat Position

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front of  
seat

(8) Other abnormal posture (specify):

(9) Unknown

## EJECTION/ENTRAPMENT

12. Ejection Φ

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area Φ

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium Φ

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) Φ

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 2

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): FIRE

\_\_\_\_\_  
(9) Unknown

17. Occupant Mobility Φ

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or disoriented
- (2) Removed from vehicle due to injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (9) Unknown

## BELT SYSTEM FUNCTION

## 18. Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown

## 19. Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

(02) Shoulder belt

(03) Lap belt

(04) Lap and shoulder belt

(05) Belt used—type unknown

(08) Other belt used (specify):

(12) Shoulder belt used with child safety seat

(13) Lap belt used with child safety seat

(14) Lap and shoulder belt used with child safety seat

(15) Belt used with child safety seat—type unknown

(18) Other belt used with child safety seat (specify):

(99) Unknown if belt used

## 20. Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

(3) Shoulder belt worn under arm

(4) Shoulder belt worn behind back or seat

(5) Belt worn around more than one person

(6) Lap belt worn on abdomen

(7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of manual belt system (specify):

(9) Unknown

## 21. Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

(6) Broken retractor

(7) Combination of above (specify):

(8) Other manual belt failure (specify):

(9) Unknown

## 22. Shoulder Belt Upper Anchorage Adjustment

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

## 23. Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

## 24. Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
- (3) Automatic belt use unknown
- (9) Unknown

## 25. Automatic (Passive) Belt System Type

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

## 26. Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify):

- (8) Other improper use of automatic belt system (specify):
- (9) Unknown

## 27. Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

(6) Broken retractor

(7) Combination of above (specify):

(8) Other automatic belt failure (specify):

(9) Unknown

## POLICE REPORTED RESTRAINT USE

## AIR BAG SYSTEM FUNCTION

## 28. Police Reported Belt Use

9

- (0) None used
- (1) Police did not indicate belt use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Automatic belt
- (8) Other type belt, (specify):

(9) Police indicated "unknown"

## 29. Police Reported Air Bag Availability/Function

1

- (0) No air bag available
- (1) Police did not indicate air bag availability/function
- (2) Deployed
- (3) Not deployed
- (4) Unknown if deployed
- (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- ☐ Not equipped/not available/destroyed or rendered inoperative
- ☐ Vehicle inspection
- ☐ Official injury data
- ☐ Driver/occupant interview
- ☐ Other (specify):

☒ Unknown if belt used

## 30. Frontal Air Bag System Availability/Function

Ø

- (This Occupant Position)
- (0) Not equipped/not available
  - (1) Air bag

Non-functional

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
- (9) Unknown

## 31. Frontal Air Bag System Deployment

Ø

- (This Occupant Position)
- (0) Not equipped/not available
  - (1) Deployed during accident (as a result of impact)
  - (2) Deployed inadvertently just prior to accident
  - (3) Deployed, details unknown
  - (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
  - (5) Unknown if deployed
  - (7) Nondeployed
  - (9) Unknown

## 32. Other Than First Seat Frontal Air Bag Availability/Function

Ø

- (This Occupant Position)
- (0) Not equipped/not available
  - (1) Air bag

Non-functional

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
- (9) Unknown

Specify type of "other" air bag present:

## 33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position)

Ø

- (0) Not equipped with an "other" air bag
- (1) Deployed during accident (as a result of impact)
- (2) Deployed inadvertently just prior to accident
- (3) Deployed, details unknown
- (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (5) Unknown if deployed
- (7) Nondeployed
- (9) Unknown

## 34. Are There Indications of Air Bag System Failure?

Ø

- (This Occupant Position)
- (0) Not equipped/not available
  - (1) No
  - (2) Yes (specify):

(9) Unknown



## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? ☒

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag ☒

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? ☒

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify):  
\_\_\_\_\_  
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number ☒ ☒

- (00) Not equipped/not available  
\_\_\_\_\_  
Code the accident event sequence number that initiated the air bag deployment  
(96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact ☒

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify):  
\_\_\_\_\_  
(6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact ☒ ☒ ☒

- (-000) Not equipped/not available  
Code the value of the delta V for the impact that initiated the air bag deployment  
(-996) Deployment, unknown longitudinal Delta V  
(-997) Not deployed  
(-998) Unknown if deployed  
(-999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? ☒

- (0) Not equipped/not available  
(1) No  
(2) Yes  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? ☒

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify):  
\_\_\_\_\_  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag? ☒ ☒

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify):  
\_\_\_\_\_

- (95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION *continued*

## HEAD RESTRAINT AND SEAT EVALUATION

44. Source of Air Bag Damage 00
- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify): \_\_\_\_\_
- (03) Object carried by occupant, (specify): \_\_\_\_\_
- (04) Adaptive/assistive controls, (specify): \_\_\_\_\_
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify): \_\_\_\_\_
- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

45. Was The Air Bag Tethered? 0
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps): \_\_\_\_\_

- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

46. Did The Air Bag Have Vent Ports? 0
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports): \_\_\_\_\_

- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 0
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): \_\_\_\_\_
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

48. Was This Occupant Wearing Eye-wear? 0
- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

49. Head Restraint Type/Damage by Occupant at This Occupant Position 9

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

50. Seat Type (this Occupant Position) 99
- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Box mounted seat (i.e., van type)
- (10) Other seat type (specify): \_\_\_\_\_

- (99) Unknown

51. Seat Orientation (this Occupant Position) 1
- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_

- (9) Unknown

52. Seat Track Adjusted Position Prior To Impact 1
- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track

*Adjustable Seat Track*

- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 61

- (00) Occupant not seated or no seat  
 (01) Not adjustable

*Upright prior to impact*

- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

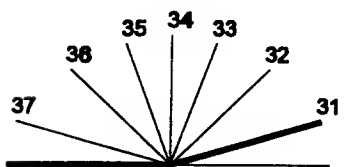
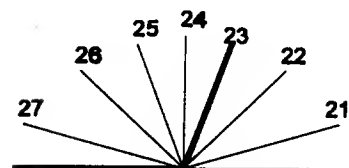
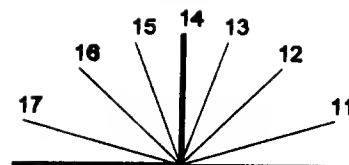
*Slightly reclined prior to impact*

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position

(99) Unknown

54. Seat Performance (this Occupant Position) 9

- (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed  
     (specify): \_\_\_\_\_  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment intrusion,  
     (specify): \_\_\_\_\_  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

## CHILD SAFETY SEAT

## 55. Child Safety Seat Make/Model

(000) No child safety seat

Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

## 56. Type of Child Safety Seat

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

## 57. Child Safety Seat Orientation

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This  
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

## 58. Child Safety Seat Harness Usage

## 59. Child Safety Seat Shield Usage

## 60. Child Safety Seat Tether Usage

Note: Options below applicable to  
Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*(01) After market harness/shield/tether  
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
harness/shield/tether added(09) Unknown if harness/shield/tether  
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used



## INJURY CONSEQUENCES

61. Injury Severity (Police Rating) 4

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality 1

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) Ø

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

(9) Unknown

64. Hospital Stay Ø Ø

(00) Not Hospitalized

Code the number of days (up through 60) that the occupant stayed in hospital.

- (61) 61 days or more
- (99) Unknown

65. Working Days Lost 62

- Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

99. Case Occupant Ø

- (0) Not the Case Occupant
- (1) This is the Case Occupant
- (2) This is the Case Occupant in another case.

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES**66. Time to Death 01

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

67. 1st Medically Reported Cause of Death 9968. 2nd Medically Reported Cause of Death 9969. 3rd Medically Reported Cause of Death 99  
Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes  
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):  
\_\_\_\_\_

(97) Other result (includes fatal ruled disease) (specify):  
\_\_\_\_\_

(99) Unknown

70. Number of Recorded Injuries for This Occupant 97

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

**TRAUMA DATA**71. Glasgow Coma Scale (GCS) Score (at Medical Facility) 01

- (00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured

72. Was the Occupant Given Blood? 1

- (1) No - blood not given  
(2) Yes - blood given  
(specify units): \_\_\_\_\_  
(9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 01

- (00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the HCO<sub>3</sub>  
(96) ABGs reported, HCO<sub>3</sub> unknown  
(97) Injured, details unknown  
(99) Unknown if injured

**BELT USE DETERMINATION**74. Primary Source of Belt Use Determination 9

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown if belt used

National Highway Traffic Safety  
AdministrationNATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number \_\_\_\_\_

2. Case Number - Stratum DS1-95-SP-0133. Vehicle Number 014. Occupant Number 06

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 62

Code actual age at time of accident.

(00) Less than one year old (specify by month): \_\_\_\_\_

(97) 97 years and older

(99) Unknown

6. Occupant's Sex 2

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height 999Code actual height to the nearest  
centimeter.

(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

8. Occupant's Weight 999Code actual weight to the nearest  
kilogram.

(999) Unknown

\_\_\_\_\_ pounds X .4536 = \_\_\_\_\_ kilograms

9. Occupant's Role 2

(1) Driver

(2) Passenger

(9) Unknown

## OCCUPANT'S SEATING

10. Occupant's Seat Position 99

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify): \_\_\_\_\_

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify): \_\_\_\_\_

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify): \_\_\_\_\_

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify): \_\_\_\_\_

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify): \_\_\_\_\_

(99) Unknown

11. Occupant's Posture 9

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front of  
seat

(8) Other abnormal posture (specify): \_\_\_\_\_

(9) Unknown

## EJECTION/ENTRAPMENT

12. Ejection Ø

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area Ø

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium Ø

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) Ø

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 2

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): FIRE

\_\_\_\_\_  
(9) Unknown

17. Occupant Mobility Ø

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or disoriented
- (2) Removed from vehicle due to injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (9) Unknown



## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 9

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown

19. Manual (Active) Belt System Use 99

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 9

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of manual belt system (specify):

(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident 9

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):

(8) Other manual belt failure (specify):

(9) Unknown

22. Shoulder Belt Upper Anchorage Adjustment 9

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function Ø

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use Ø

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type Ø

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System Ø

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify):

- (8) Other improper use of automatic belt system (specify):
- (9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident Ø

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other automatic belt failure (specify):

(9) Unknown

## POLICE REPORTED RESTRAINT USE

28. Police Reported Belt Use 9

- (0) None used  
 (1) Police did not indicate belt use  
 (2) Shoulder belt  
 (3) Lap belt  
 (4) Lap and shoulder belt  
 (5) Belt used, type not specified  
 (6) Child safety seat  
 (7) Automatic belt  
 (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 1

- (0) No air bag available  
 (1) Police did not indicate air bag availability/function  
 (2) Deployed  
 (3) Not deployed  
 (4) Unknown if deployed  
 (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- [ ] Not equipped/not available/destroyed or rendered inoperative  
 [ ] Vehicle inspection  
 [ ] Official injury data  
 [ ] Driver/occupant interview  
 [ ] Other (specify):

[x] Unknown if belt used

## AIR BAG SYSTEM FUNCTION

30. Frontal Air Bag System Availability/Function Ø

- (This Occupant Position)  
 (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):

- (3) Air bag not reinstalled  
 (9) Unknown

31. Frontal Air Bag System Deployment Ø

- (This Occupant Position)  
 (0) Not equipped/not available  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function Ø

- (This Occupant Position)  
 (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):

- (3) Air bag not reinstalled  
 (9) Unknown

*Specify type of "other" air bag present:*

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) Ø

- (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

34. Are There Indications of Air Bag System Failure? Ø

- (This Occupant Position)  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):

(9) Unknown

## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? ☒

(0) Not equipped/not available

(1) No previous accidents

Yes

(2) Previous accident(s) without deployment(s)

(3) One previous accident with deployment

(4) More than one previous accident with at least one deployment

(8) Previous accidents, unknown deployment status

(9) Unknown

36. Type of Air Bag ☒

(0) Not equipped/not available

(1) Original manufacturer installed system

(2) Retrofitted air bag

(3) Replacement air bag

(8) Unknown type of air bag

(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? ☒

(0) Not equipped/not available

(1) No prior maintenance

(2) Yes, prior maintenance (specify): \_\_\_\_\_

(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number ☒

(00) Not equipped/not available

Code the accident event sequence number that initiated the air bag deployment

(96) Deployed, unknown event

(97) Not deployed

(98) Unknown if deployed

(99) Unknown

39. CDC For Air Bag Deployment Impact ☒

(0) Not equipped/not available

(1) Highest delta V

(2) Second highest delta V

(3) Other non-coded delta V (specify): \_\_\_\_\_

(6) Deployed, unknown event

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact ☒

(-000) Not equipped/not available

Code the value of the delta V for the impact that initiated the air bag deployment

(-996) Deployment, unknown longitudinal Delta V

(-997) Not deployed

(-998) Unknown if deployed

(-999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? ☒

(0) Not equipped/not available

(1) No

(2) Yes

(3) Deployed, unknown if flap(s) opened at designated tear points

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? ☒

(0) Not equipped/not available

(1) No

(2) Yes (specify): \_\_\_\_\_

(3) Deployed, unknown if air bag module cover flap(s) damaged

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

43. Was There Damage To The Air Bag? ☒

(00) Not equipped/not available

(01) Not damaged

Yes - Air Bag Damage

(02) Ruptured

(03) Cut

(04) Torn

(05) Holed

(06) Burned

(07) Abraded

(88) Other damage (specify): \_\_\_\_\_

(95) Damaged, details unknown

(96) Deployed, unknown if damaged

(97) Not deployed

(98) Unknown if deployed

(99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION *continued*

## HEAD RESTRAINT AND SEAT EVALUATION

44. Source of Air Bag Damage Ø Ø
- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify): \_\_\_\_\_
- (03) Object carried by occupant, (specify): \_\_\_\_\_
- (04) Adaptive/assistive controls, (specify): \_\_\_\_\_
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify): \_\_\_\_\_
- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

45. Was The Air Bag Tethered? Ø
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps): \_\_\_\_\_

- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

46. Did The Air Bag Have Vent Ports? Ø
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports): \_\_\_\_\_

- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? Ø
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): \_\_\_\_\_

- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

48. Was This Occupant Wearing Eye-wear? Ø
- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

49. Head Restraint Type/Damage by Occupant at This Occupant Position 9

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): \_\_\_\_\_

- (9) Unknown

50. Seat Type (this Occupant Position) 9 9
- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Box mounted seat (i.e., van type)
- (10) Other seat type (specify): \_\_\_\_\_

- (99) Unknown

51. Seat Orientation (this Occupant Position) /
- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_

- (9) Unknown

52. Seat Track Adjusted Position Prior To Impact /
- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track

*Adjustable Seat Track*

- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown



HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 6 1

- (00) Occupant not seated or no seat  
 (01) Not adjustable

*Upright prior to impact*

- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

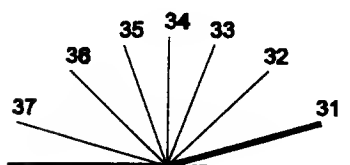
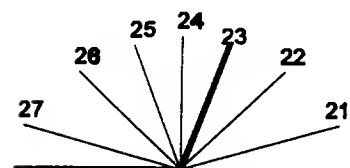
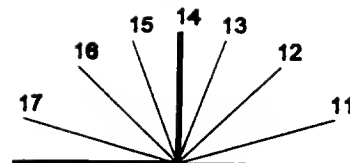
*Slightly reclined prior to impact*

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position

(99) Unknown

54. Seat Performance (this Occupant Position) 9

- (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed  
 (specify): \_\_\_\_\_  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment intrusion,  
 (specify): \_\_\_\_\_  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

## CHILD SAFETY SEAT

## 55. Child Safety Seat Make/Model

(000) No child safety seat

Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

## 56. Type of Child Safety Seat

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

## 57. Child Safety Seat Orientation

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This  
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

## 58. Child Safety Seat Harness Usage

## 59. Child Safety Seat Shield Usage

## 60. Child Safety Seat Tether Usage

Note: Options below applicable to  
Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*(01) After market harness/shield/tether  
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
harness/shield/tether added(09) Unknown if harness/shield/tether  
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

## INJURY CONSEQUENCES

## 61. Injury Severity (Police Rating)

4

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

## 62. Treatment - Mortality

1

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

## 63. Type Of Medical Facility (for Initial Treatment)

Ø

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):
- (9) Unknown

## 64. Hospital Stay

Ø Ø

- (00) Not Hospitalized
- Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

## 65. Working Days Lost

62

- Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

## 99. Case Occupant

Ø

- (0) Not the Case Occupant
- (1) This is the Case Occupant
- (2) This is the Case Occupant in another case.

STOP WORK HERE

VARIABLES 66-74

TO BE CODED BY THE ZONE CENTER

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES****66. Time to Death**

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

**67. 1st Medically Reported Cause of Death****68. 2nd Medically Reported Cause of Death****69. 3rd Medically Reported Cause of Death**

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes  
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

**70. Number of Recorded Injuries for This Occupant**

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

**TRAUMA DATA****71. Glasgow Coma Scale (GCS) Score (at Medical Facility)**

- (00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured

**72. Was the Occupant Given Blood?**

- (1) No - blood not given  
(2) Yes - blood given  
(specify units):  
(9) Unknown if blood given

**73. Arterial Blood Gases (ABG) - HCO<sub>3</sub>**

- (00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the HCO<sub>3</sub>  
(96) ABGs reported, HCO<sub>3</sub> unknown  
(97) Injured, details unknown  
(99) Unknown if injured

**BELT USE DETERMINATION****74. Primary Source of Belt Use Determination**

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify):  
(9) Unknown if belt used





## GENERAL VEHICLE FORM

1. Primary Sampling Unit Number

2. Case Number - Stratum

DSI-95-SP-013

3. Vehicle Number

02

## VEHICLE IDENTIFICATION

4. Vehicle Model Year

Code the last two digits of the model year  
(99) Unknown91

5. Vehicle Make (specify):

TOYOTAApplicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown49

6. Vehicle Model (specify):

CELICA GTSApplicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(999) Unknown033

7. Body Type

Note: Applicable codes may be found on  
the back of this page.03

8. Vehicle Identification Number

JT2SI95N8M0XXXXXX  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17Left justify; Slash zeros and letter Z (0 and Z)  
No VIN—Code all zeros  
Unknown—Code all nines

9. Vehicle Special Use (This Trip)

- (0) No special use  
(1) Taxi  
(2) Vehicle used as school bus  
(3) Vehicle used as other bus  
(4) Military  
(5) Police  
(6) Ambulance  
(7) Fire truck or car  
(8) Other (specify):  
(9) Unknown

0

## OFFICIAL RECORDS

10. Police Reported Vehicle Disposition

- (0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

1

11. Police Reported Travel Speed

Code to the nearest kmph (NOTE: 000 means  
less than 0.5 kmph)  
(160) 159.5 kmph and above  
(999) Unknown999

\_\_\_\_ mph X 1.6093 = \_\_\_\_ kmph

12. Speed Limit

(000) No statutory limit

Code posted or statutory speed limit  
in kmph

(999) Unknown

08955 mph X 1.6093 = 089 kmph

13. Police Reported Alcohol Presence For Driver

- (0) No alcohol present  
(1) Yes alcohol present  
(7) Not reported  
(8) No driver present  
(9) Unknown

1

14. Alcohol Test Result For Driver

- Code actual value (decimal implied  
before first digit—0.xx)  
(95) Test refused  
(96) None given  
(97) AC test performed, results unknown  
(98) No driver present  
(99) Unknown

97Source: PAR15. Police Reported Other Drug Presence For  
Driver

- (0) No other drug(s) present  
(1) Yes other drug(s) present  
(7) Not reported  
(8) No driver present  
(9) Unknown

9

16. Other Drug Specimen Test Result For Driver

- (0) No specimen test given  
(1) Drug(s) not found in specimen  
(2) Drug(s) found in specimen, (specify):  
(3) Specimen test given, results unknown or not  
obtained  
(8) No driver present  
(9) Unknown if specimen test given

9

17. Driver's Zip Code

(00001) Driver not a resident of U.S. or territories  
Code actual 5-digit zip code  
(99998) No driver present  
(99999) Unknown

18. Driver's Race/Ethnic Origin

- (1) White (non-Hispanic)  
(2) Black (non-Hispanic)  
(3) White (Hispanic)  
(4) Black (Hispanic)  
(5) American Indian, Eskimo or Aleut  
(6) Asian or Pacific Islander  
(7) Other (specify):

1

- (8) No driver present  
(9) Unknown

# CODES FOR BODY TYPE

## CDS APPLICABLE VEHICLES

### Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): \_\_\_\_\_
- (09) Unknown automobile type

### Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

### Utility Vehicles ( $\leq 4,500$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Hummer, Landcruiser, Rover, Scout, Yukon)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

### Van Based Light Trucks ( $\leq 4,500$ kgs GVWR)

- (20) Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ( $\leq 4,500$  kgs GVWR)
- (23) Van based motorhome ( $\leq 4,500$  kgs GVWR)
- (24) Van based school bus ( $\leq 4,500$  kgs GVWR)
- (25) Van based other bus ( $\leq 4,500$  kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): \_\_\_\_\_
- (29) Unknown van type

### Light Conventional Trucks (Pickup style cab, $\leq 4,500$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)

- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

### Other Light Trucks ( $\leq 4,500$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

## OTHER VEHICLES

### Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): \_\_\_\_\_
- (59) Unknown bus type

### Medium/Heavy Trucks ( $> 4,500$ kgs GVWR)

- (60) Step van ( $> 4,500$  kgs GVWR)
- (61) Single unit straight truck ( $4,500$  kgs  $<$  GVWR  $\leq 8,850$  kgs)
- (62) Single unit straight truck ( $8,850$  kgs  $<$  GVWR  $\leq 12,000$  kgs)
- (63) Single unit straight truck ( $> 12,000$  kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

### Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): \_\_\_\_\_
- (89) Unknown motored cycle type

### Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

## PRECRASH ENVIRONMENTAL DATA

19. Relation To Interchange Or Junction φ

- (0) Non-interchange area and non-junction  
 (1) Interchange area related

*Non-Interchange junctions*

- (2) Intersection related  
 (3) Driveway, alley access related  
 (4) Other junction (specify) \_\_\_\_\_

(5) Unknown type of junction \_\_\_\_\_

(9) Unknown

20. Trafficway Flow 1

- (0) Not physically divided (two way traffic)  
 (1) Divided trafficway-median strip without positive barrier  
 (2) Divided trafficway-median strip with positive barrier  
 (3) One way traffic  
 (9) Unknown

21. Number Of Travel Lanes 5

- (1) One  
 (2) Two  
 (3) Three  
 (4) Four  
 (5) Five  
 (6) Six  
 (7) Seven or more  
 (9) Unknown

22. Roadway Alignment 1

- (1) Straight  
 (2) Curve right  
 (3) Curve left  
 (9) Unknown

23. Roadway Profile 4

- (1) Level  
 (2) Uphill grade (>2%)  
 (3) Hill crest  
 (4) Downhill grade (>2%)  
 (5) Sag  
 (9) Unknown

24. Roadway Surface Type 2

- (1) Concrete  
 (2) Bituminous (asphalt)  
 (3) Brick or block  
 (4) Slag, gravel, or stone  
 (5) Dirt  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

25. Roadway Surface Condition 1

- (1) Dry  
 (2) Wet  
 (3) Snow or slush  
 (4) Ice  
 (5) Sand, dirt, or oil  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

26. Light Conditions 3

- (1) Daylight  
 (2) Dark  
 (3) Dark, but lighted  
 (4) Dawn  
 (5) Dusk  
 (9) Unknown

27. Atmospheric Conditions φ

- (0) No adverse atmospheric-related driving conditions  
 (1) Rain  
 (2) Sleet/hail  
 (3) Snow  
 (4) Fog  
 (5) Rain and fog  
 (6) Sleet and fog  
 (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): \_\_\_\_\_  
 (9) Unknown

28. Traffic Control Device 5

- (0) No traffic control(s)  
 (1) Traffic control signal (not RR crossing)

*Regulatory*

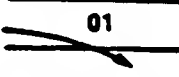


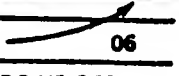

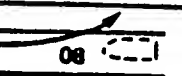
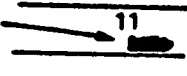


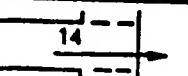
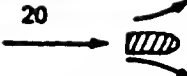
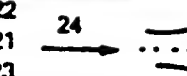
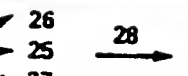
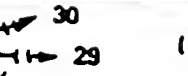
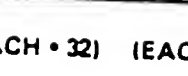



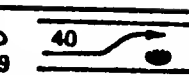

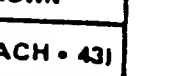
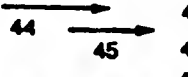

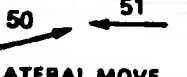
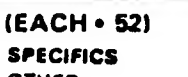

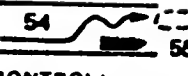
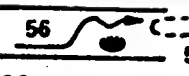
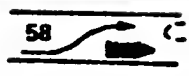
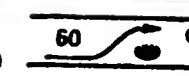
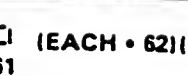
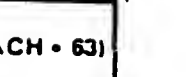



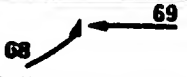

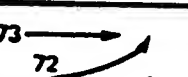

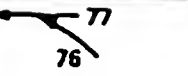
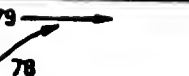

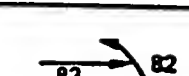
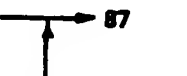

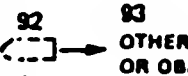

- (2) Stop sign  
 (3) Yield sign  
 (4) School zone sign  
 (5) Other regulatory sign (specify): \_\_\_\_\_

- DO NOT ENTER  
 (6) Warning sign (not RR crossing)  
 (7) Unknown sign  
 (8) Miscellaneous/other controls including RR controls (specify): \_\_\_\_\_

(9) Unknown

29. Traffic Control Device Functioning 2

- (0) No traffic control device  
 (1) Traffic control device not functioning (specify) \_\_\_\_\_  
 (2) Traffic control device functioning properly  
 (9) Unknown

		BEST AVAILABLE					
Category	Configuration	ACCIDENT TYPES (Includes Intent)					
I. Single Driver	A. Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN	
	B. Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN	
	C. Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER	16 SPECIFICS UNKNOWN
II. Same Trafficway Same Direction	D. Rear-End	 20 STOPPED 21, 22, 23	 22 SLOWER 25, 26, 27	 24 DECEL. 29, 30, 31	 26 SPECIFICS OTHER	 28 SPECIFICS UNKNOWN	
	E. Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	 42 SPECIFICS OTHER	 44 SPECIFICS UNKNOWN
	F. Sideswipe Angle	 44 (EACH • 48) SPECIFICS OTHER	 46 (EACH • 49) SPECIFICS UNKNOWN				
III. Same Trafficway Opposite Direction	G. Head-On	 50 LATERAL MOVE	 51 (EACH • 52) SPECIFICS OTHER	 53 (EACH • 53) SPECIFICS UNKNOWN			
	H. Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	 62 SPECIFICS OTHER	 64 SPECIFICS UNKNOWN
	I. Sideswipe Angle	 64 LATERAL MOVE	 65 (EACH • 66) SPECIFICS OTHER	 67 (EACH • 67) SPECIFICS UNKNOWN			
IV. Change Trafficway Vehicle Turning	J. Turn Across Path	 68 INITIAL OPPOSITE DIRECTIONS	 70 INITIAL SAME DIRECTIONS	 72 (EACH • 74) SPECIFICS OTHER	 74 (EACH • 75) SPECIFICS UNKNOWN		
	K. Turn Into Path	 76 TURN INTO SAME DIRECTION	 78 TURN INTO OPPOSITE DIRECTIONS	 80 (EACH • 84) SPECIFICS OTHER	 82 (EACH • 85) SPECIFICS UNKNOWN		
V. Intersecting Paths (Vehicle Damage)	L. Straight Paths	 86 (EACH • 90) SPECIFICS OTHER	 88 (EACH • 91) SPECIFICS UNKNOWN				
VI. Miscellaneous	M. Backing Etc.	 92 BACKING VEH.	 93 OTHER VEH. OR OBJECT	98 Other Accident Type 99 Unknown Accident Type 00 No Impact			



## PRECRASH DRIVER RELATED DATA

30. Driver's Distraction/Inattention To Driving  
(Prior To Recognition Of Critical Event)

- 99
- (00) No driver present
- (01) Attentive or not distracted
- (02) Looked but did not see
- Distractions
- (03) By other occupant(s), (specify): \_\_\_\_\_
- (04) By moving object in vehicle (specify): \_\_\_\_\_
- (05) While talking or listening to cellular phone (specify location and type of phone): \_\_\_\_\_
- (06) While dialing cellular phone (specify location and type of phone): \_\_\_\_\_
- (07) While adjusting climate controls
- (08) While adjusting radio, cassette, CD (specify): \_\_\_\_\_
- (09) While using other device/object in vehicle (specify): \_\_\_\_\_
- (10) Sleepy or fell asleep
- (11) Distracted by outside person, object, or event (specify): \_\_\_\_\_
- (12) Eating or drinking
- (13) Smoking related
- (97) Distracted/inattentive, details unknown
- (98) Other, distraction (specify): \_\_\_\_\_
- (99) Unknown

## 31. Pre-Event Movement (Prior to Recognition of Critical Event)

- φ /
- (00) No driver present
- (01) Going straight
- (02) Decelerating in traffic lane
- (03) Accelerating in traffic lane
- (04) Starting in traffic lane
- (05) Stopped in traffic lane
- (06) Passing or overtaking another vehicle
- (07) Disabled or parked in travel lane
- (08) Leaving a parking position
- (09) Entering a parking position
- (10) Turning right
- (11) Turning left
- (12) Making a U-turn
- (13) Backing up (other than for parking position)
- (14) Negotiating a curve
- (15) Changing lanes
- (16) Merging
- (17) Successful avoidance maneuver to a previous critical event
- (97) Other (specify): \_\_\_\_\_
- (99) Unknown

## 32. Critical Precrash Event

This Vehicle Loss of Control Due To:

- 98
- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): \_\_\_\_\_
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): \_\_\_\_\_
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): \_\_\_\_\_
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): \_\_\_\_\_
- (09) Unknown cause of control loss

## This Vehicle Traveling

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (18) This vehicle decelerating
- (19) Unknown travel direction

## Other Motor Vehicle In Lane

- (50) Other vehicle stopped
- (51) Traveling in same direction with lower steady speed
- (52) Traveling in same direction while decelerating
- (53) Traveling in same direction with higher speed
- (54) Traveling in opposite direction
- (55) In crossover
- (56) Backing
- (59) Unknown travel direction of other motor vehicle in lane

## Other Motor Vehicle Encroaching Into Lane

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

## Pedestrian, Pedalcyclist, or Other Nonmotorist

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian—unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): \_\_\_\_\_
- (84) Pedalcyclist or other nonmotorist approaching roadway, (specify): \_\_\_\_\_
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): \_\_\_\_\_

## Object or Animal

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location
- (98) Other critical precrash event (specify): WRONG WAY ON A ONEWAY
- (99) Unknown ROADWAY

33. Attempted Avoidance Maneuver 00

- (00) No driver present
- (01) No avoidance maneuver
- (02) Braking (no lockup)
- (03) Braking (lockup)
- (04) Braking (lockup unknown)
- (05) Releasing brakes
- (06) Steering left
- (07) Steering right
- (08) Braking and steering left
- (09) Braking and steering right
- (10) Accelerating
- (11) Accelerating and steering left
- (12) Accelerating and steering right
- (98) Other action (specify):

(99) Unknown

34. Pre-Impact Stability 1

- (0) No driver present
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify):

(9) Precrash stability unknown

35. Pre-Impact Location 1

- (0) No driver present
- (1) Stayed in original travel lane
- (2) Stayed on roadway but left original travel lane
- (3) Stayed on roadway, not known if left original travel lane
- (4) Departed roadway
- (5) Remained off roadway
- (6) Returned to roadway
- (7) Entered roadway
- (9) Unknown

36. Accident Type 52

(Note: Applicable codes on back of this page)

- (00) No impact

Code the number of the diagram that best describes the accident circumstance

- (98) Other accident type (specify):

(99) Unknown

**STOP HERE IF GV07 DOES NOT EQUAL 01 - 49**

## OCCUPANT RELATED

37. Driver Presence in Vehicle 1  
(0) Driver not present  
(1) Driver present  
(9) Unknown
38. Number of Occupants This Vehicle 0 1  
(00-96) Code actual number of occupants for this vehicle  
(97) 97 or more  
(99) Unknown
39. Number of Occupant Forms Submitted 0 1

## AIR BAG RELATED

40. Is this an AOPS Vehicle? 1  
(0) No (includes unknown)  
(1) Yes - researcher determined  
(2) VIN determined air bag system  
(3) VIN determined automatic (passive) belts  
(4) VIN determined air bag and automatic (passive) belts
41. Air Bag(s) Deployment, First Seat Frontal 2  
(0) Not equipped or not available  
(1) No air bags deployed  
*Single Air Bag Vehicle*  
(2) Driver air bag deployed  
(3) Driver air bag, unknown if deployed  
*Multiple Air Bag Vehicle*  
(4) Driver side only deployed  
(5) Passenger side only deployed  
(6) Driver and passenger side deployed  
(7) Driver and passenger side unknown if deployed  
(8) Air bag(s) deployed, details unknown  
(9) Unknown
42. Air Bag(s) Deployment, Other Than First Seat Frontal 0  
(0) Not equipped with an "other" air bag  
(1) Deployed during accident (as a result of impact)  
(2) Deployed inadvertently just prior to accident  
(3) Deployed, details unknown  
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(5) Unknown if deployed  
(7) Nondeployed  
(9) Unknown

Specify type of "other" air bag present: \_\_\_\_\_

## VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight 1 2 7 0  
Code weight to nearest 10 kilograms.  
(045) Less than 450 kilograms  
(610) 6,100 kilograms or more  
(999) Unknown  
0 2 8 0 4 lbs X .4536 = 1 2 7 2 kgs

Source: \_\_\_\_\_

44. Vehicle Cargo Weight 0 0 0 0  
Code weight to nearest 10 kilograms.  
(000) Less than 5 kilograms  
(450) 4,500 kilograms or more  
(999) Unknown  
\_\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs

Source: \_\_\_\_\_

## ROLLOVER DATA

45. Rollover 0 0  
(00) No rollover (no overturning)  
*Rollover (primarily about the longitudinal axis)*  
(01-16) Code the number of quarter turns  
(17) Rollover, 17 or more quarter turns (specify):  
(98) Rollover—end-over-end (i.e., primarily about the lateral axis)  
(99) Rollover (overturn), details unknown
46. Rollover Initiation Type 0 0  
(00) No rollover  
(01) Trip-over  
(02) Flip-over  
(03) Turn-over  
(04) Climb-over  
(05) Fall-over  
(06) Bounce-over  
(07) Collision with another vehicle  
(08) Other rollover initiation type specify):  
(98) Rollover—end-over-end  
(99) Unknown rollover initiation type
47. Location of Rollover Initiation 0  
(0) No rollover  
(1) On roadway  
(2) On shoulder—paved  
(3) On shoulder—unpaved  
(4) On roadside or divided trafficway median  
(8) Rollover—end-over-end  
(9) Unknown
48. Rollover Initiation Object Contacted 0 0  
(Note: Applicable codes on back of page)
49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0  
(0) No rollover  
(1) Wheels/tires  
(2) Side plane  
(3) End plane  
(4) Undercarriage  
(5) Other location on vehicle (specify):  
(6) Non-contact rollover forces (specify):  
(8) Rollover—end-over-end  
(9) Unknown
50. Direction of Initial Roll 0  
(0) No rollover  
(1) Roll right - primarily about the longitudinal axis  
(2) Roll left - primarily about the longitudinal axis  
(8) Rollover—end-over-end  
(9) Unknown roll direction

## CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

- (00) No rollover
- (01-30) — Vehicle Number

### Noncollision

- (31) Turn-over — fall-over
- (32) No rollover impact initiation (end-over-end)
- (34) Jackknife

### Collision With Fixed Object

- (41) Tree ( $\leq 10$  cm in diameter)
- (42) Tree ( $> 10$  cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

- (45) Breakaway pole or post (any diameter)

### Nonbreakaway Pole or Post

- (50) Pole or post ( $\leq 10$  cm in diameter)
- (51) Pole or post ( $> 10$  cm but  $\leq 30$  cm in diameter)
- (52) Pole or post ( $> 30$  cm in diameter)
- (53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail)  
(specify): \_\_\_\_\_

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): \_\_\_\_\_

- (69) Unknown fixed object

### Collision with Nonfixed Object

- (70) Passenger car, light truck, van, or other vehicle not in-transport
- (71) Medium/heavy truck or bus not in-transport
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify): \_\_\_\_\_

- (89) Unknown nonfixed object

- (98) Other event (specify): \_\_\_\_\_

- (99) Unknown event or object



## OVERRIDE/UNDERRIDE (THIS VEHICLE)

51. Front Override/Underride (this Vehicle) Ø
52. Rear Override/Underride (this Vehicle) Ø
- (0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride

*Override (see specific CDC)*

*[Between 2 CDS applicable vehicles (Bodytype, GV07=1-49)]*

- (1) 1st CDC  
(2) 2nd CDC  
(3) Other not automated CDC (specify):  
\_\_\_\_\_

*Underride (see specific CDC)*

*[Between 2 CDS applicable vehicles (Bodytype, GV07=1-49)]*

- (4) 1st CDC  
(5) 2nd CDC  
(6) Other not automated CDC (specify):  
\_\_\_\_\_

- (7) Medium/heavy truck or bus override (of any configuration)  
(9) Unknown

## HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value

- (997) Noncollision  
(998) Impact with object  
(999) Unknown

53. Heading Angle For This Vehicle 1 8 Ø
54. Heading Angle For Other Vehicle Ø Ø Ø

## RECONSTRUCTION DATA

55. Towed Trailing Unit Ø
- (0) No towed unit  
(1) Yes—towed trailing unit  
(9) Unknown
56. Documentation of Trajectory Data for This Vehicle Ø
- (0) No  
(1) Yes
57. Post Collision Condition of Tree or Pole (For Highest Delta V) Ø
- (0) Not collision (for highest delta V) with tree or pole  
(1) Not damaged  
(2) Cracked/sheared  
(3) Tilted <45 degrees  
(4) Tilted ≥45 degrees  
(5) Uprooted tree  
(6) Separated pole from base  
(7) Pole replaced  
(8) Other (specify):  
\_\_\_\_\_
- (9) Unknown

## ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V

58. Basis for Total (Resultant) Delta V (highest) Ø 1

- (00) No vehicle inspection

*Delta V Calculated*

- (01) Reconstruction program  
-damage only routine  
(02) Reconstruction program  
-damage and trajectory routine  
(03) Missing vehicle algorithm

*Delta V Not Calculated*

- (04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

*All vehicles within scope (CDC applicable) of reconstruction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.*

- (05) Rollover  
(06) Other non-horizontal forces  
(07) Sideswipe type damage  
(08) Severe override  
(09) Yielding object  
(10) Overlapping damage  
(11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available,  
\_\_\_\_\_

- (98) Other, (specify):  
\_\_\_\_\_

## COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V

08887.9 Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)

(160) 159.5 kmph and above

(999) Unknown

60. Longitudinal Component of  
Delta V

Highest

+087-86.6 Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: \_\_000 means greater than

-0.5 kmph and less than +0.5 kmph)

(\_\_160) ±159.5 kmph and above

(\_\_999) Unknown

61. Lateral Component of Delta V

Highest

+015-15.3 Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: \_\_000 means greater than -0.5 kmph and  
less than +0.5 kmph)

(\_\_160) ±159.5 kmph and above

(\_\_999) Unknown

62. Energy Absorption

228.600228616.2 Nearest 100 joules (highest)

\_\_\_\_ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)

(9997) 999,650 joules or more

(9999) Unknown

63. Impact Speed

Highest

998

\_\_\_\_ Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: 000 means

less than 0.5 kmph)

(160) 159.5 kmph and above

(998) Trajectory algorithm not run

(999) Unknown

## DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program  
Results (For Highest Delta V)

(0) No reconstruction

(1) Collision fits model — results appear  
reasonable

(2) Collision fits model — results appear high

(3) Collision fits model — results appear low

(4) Borderline reconstruction — results appear  
reasonable

## OTHER SPEED ESTIMATE

65. Barrier Equivalent  
Speed

Highest

06565.4 Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: 000 means

less than 0.5 kmph)

(160) 159.5 kmph and above

(999) Unknown

IS MISSING VEHICLE ALGORITHM APPLICABLE FOR THIS VEHICLE? [ ] YES [ ☒ ] NO

IF YES: IS A COMPLETED PROGRAM SUMMARY INCLUDED? [ ] YES [ ] NO

## ESTIMATED DELTA V

## VEHICLE INSPECTION

66. Estimated Highest Delta V (Researcher Determined) φ  
(0) Reconstruction Delta V coded

*Estimated Delta V*

- (1) Less than 10 kmph  
(2) ≥ 10 kmph but < 25 kmph  
(3) ≥ 25 kmph but < 40 kmph  
(4) ≥ 40 kmph but < 55 kmph  
(5) ≥ 55 kmph

*Other estimates of damage severity*

- (6) Minor  
(7) Moderate  
(8) Severe  
(9) Unknown

67. Type of Vehicle Inspection 3

- (0) No inspection  
(1) Vehicle fully repaired-no damage evident  
(2) Partial inspection (specify):  
(3) Complete inspection

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67=0), \*\*\*

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*

THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

## EXTERIOR VEHICLE FORM

1. Primary Sampling Unit Number	_____	3. Vehicle Number	<u>02</u>
2. Case Number - Stratum	<u>DS1-95-SP-013</u>		

## VEHICLE IDENTIFICATION

VIN JT2S185N8M0XXXXXX Model Year 91  
Vehicle Make (specify): TOYOTA Vehicle Model (specify): CELICA

## LOCATOR

**Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.**

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
01	FULL FRONTAL	FULL FRONTAL	C6

## CRUSH PROFILE IN CENTIMETERS

**NOTES:** Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

**Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.**

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

**Use as many lines/columns as necessary to describe each damage profile.**

[illegible]

## ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	<u>99.6</u>	inches	x 2.54	=	<u>253</u> cm
Overall Length	<u>174.0</u>	inches	x 2.54	=	<u>442</u> cm
Maximum Width	<u>68.9</u>	inches	x 2.54	=	<u>175</u> cm
Curb Weight	<u>2804</u>	pounds	x .4536	=	<u>1272</u> kg
Average Track	<u>57.9</u>	inches	x 2.54	=	<u>147</u> cm
Front Overhang	<u>38.6</u>	inches	x 2.54	=	<u>98</u> cm
Rear Overhang	<u>35.8</u>	inches	x 2.54	=	<u>91</u> cm
Undeformed End Width	<u>55.1</u>	inches	x 2.54	=	<u>140</u> cm
Engine Size: cyl./displ.	<u>2200</u>	cc	x .001	=	<u>2.2</u> L
	<u>134</u>	CID	x .0164	=	<u>2.2</u> L



# VEHICLE DAMAGE SKETCH

## TIRE—WHEEL DAMAGE

a. Rotation physically restricted      b. Tire deflated

RF 2  
LF 1  
RR 2  
LR 2

RF 2  
LF 2  
RR 2  
LR 2

(1) Yes (2) No (8) NA (9) Unk.

## TYPE OF TRANSMISSION

☐ Manual ☒ Automatic

END SHIFT ≥ 10 CM

☒ Yes ☐ No

## ORIGINAL SPECIFICATIONS

Wheelbase 253 cm  
Overall Length 442 cm  
Maximum Width 175 cm  
Curb Weight 1272 kg  
Average Track 147 cm  
Front Overhang 98 cm  
Rear Overhang 91 cm  
Undeformed End Width 140 cm  
Engine Size: cyl./displ. 2.2 L

## WHEEL STEER ANGLES (For locked front wheels or displaced rear axles only)

RF ± 0 °  
LF ± 15 °  
RR ± 0 °  
LR ± 0 °

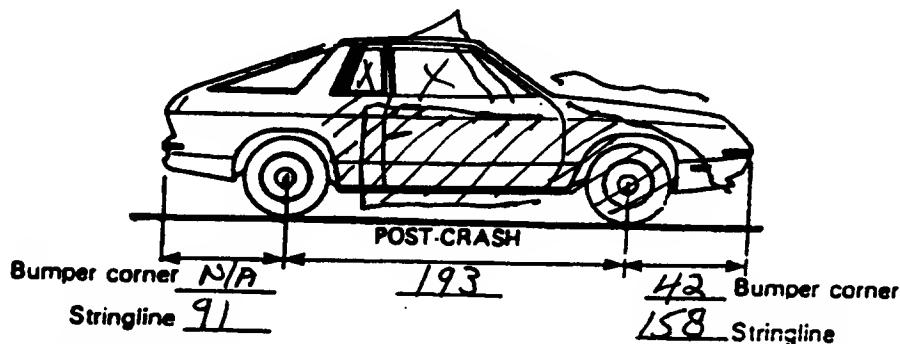
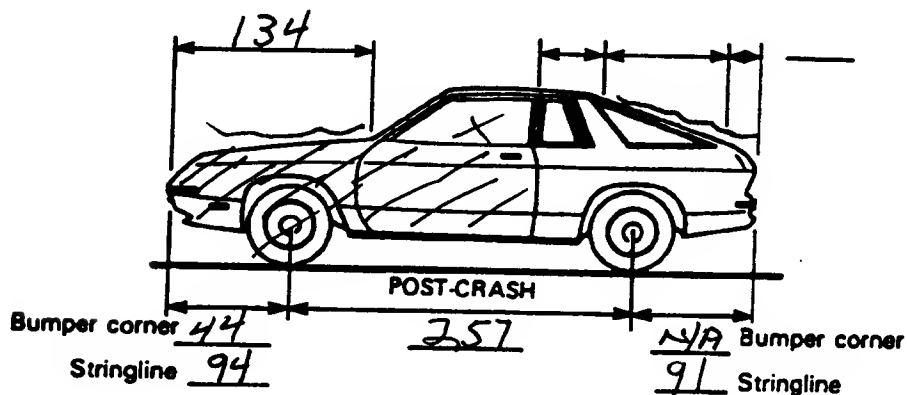
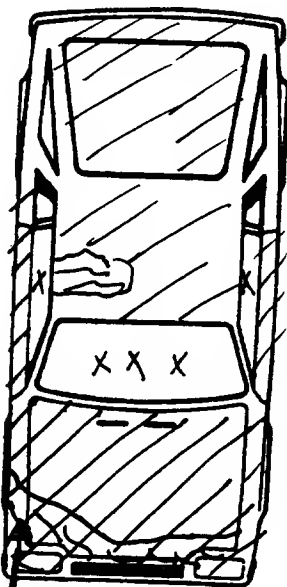
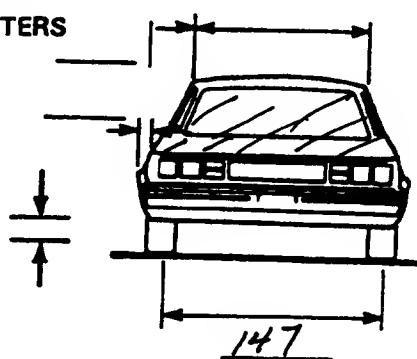
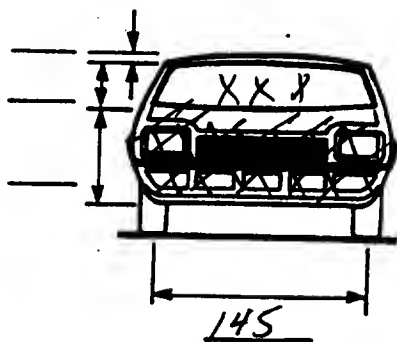
Within ± 5 degrees

## DRIVE WHEELS

☒ FWD ☐ RWD ☐ 4WD

Approximate Cargo Weight 0 kg

## MEASUREMENTS IN CENTIMETERS



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

**CODES FOR OBJECT CONTACTED**

## DEFORMATION CLASSIFICATION BY EVENT NUMBER

[illegible]

## COLLISION DEFORMATION CLASSIFICATION

## HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>1</u>	5. <u>2</u>	6. <u>72</u>	7. <u>F</u>	8. <u>D</u>	9. <u>E</u>	10. <u>W</u>	11. <u>4</u>

## Second Highest Delta "V"

12. _____	13. _____	14. _____	15. _____	16. _____	17. _____	18. _____	19. _____
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

## CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

## HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	22. <u>±D</u>
<u>140</u>	<u>440</u>	<u>882</u>	<u>881</u>	<u>995</u>	<u>102</u>	<u>106</u>	<u>+ 000</u>

## Second Highest Delta "V"

23. <u>L</u>	24. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	25. <u>±D</u>
_____	_____	_____	_____	_____	_____	_____	<u>+</u>

## 26. Undeformed End Width

(Coded when highest severity impact is an end plane impact.)

\_\_\_\_\_ Code to the nearest centimeter

(250) 250 centimeters or more

(998) No highest severity end plane impact

(999) Unknown

140

## 27. Direct Damage Width

(For highest severity impact)

\_\_\_\_\_ Code to the nearest centimeter

(250) 250 centimeters or more

(999) Unknown

140

## 28. Original Wheelbase

\_\_\_\_\_ Code to the nearest centimeter

(650) 650 centimeters or more

(999) Unknown

99.6 inches X 2.54 = 253 centimeters

253

## 29. Original Average Track Width

\_\_\_\_\_ Code to the nearest centimeter

(185) 185 centimeters or more

(999) Unknown

57.9 inches X 2.54 = 147 centimeters

147

## FUEL SYSTEM

30. Are CDCs Documented  
but Not Coded on The  
Automated File?

- (0) No  
(1) Yes

φ

31. Researcher's Assessment of Vehicle  
Disposition

- (0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

1

32. Is This A Multi-Stage Manufactured Vehicle  
And/Or A Certified Altered Vehicle?

- (0) No post manufacturer modifications  
(1) Yes - post manufacturer modifications  
(specify): \_\_\_\_\_

φ

(Include photograph of CERTIFICATION  
PLACARD in case report)

- (9) Unknown if vehicle is modified

## FIRE OCCURRENCE

33. Fire Occurrence

- (0) No fire

Yes, fire occurred

- (1) Minor  
(2) Major  
(9) Unknown

φ

34. Origin of Fire

- (0) No fire  
(1) Vehicle exterior (front, side, back, top)  
(2) Exhaust system  
(3) Fuel tank (and other fuel retention  
system parts)  
(4) Engine compartment  
(5) Cargo/trunk compartment  
(6) Instrument panel  
(7) Passenger compartment area  
(8) Other location (specify): \_\_\_\_\_

φ

- (9) Unknown

35. Location of Fuel Tank-1 Filler Cap

2

36. Location of Fuel Tank-2 Filler Cap

φ

- (0) No fuel tank  
(1) On back plane  
(2) Aft of center of the rear wheels (rear axle) on  
left side plane  
(3) Aft of center of the rear wheels (rear axle) on  
right side plane  
(4) Forward of center of the rear wheels (rear axle)  
on left side plane  
(5) Forward of center of the rear wheels (rear axle)  
on right side plane  
(6) Over the center of the rear wheels (rear axle)  
on left side plane  
(7) Over the center of the rear wheels (rear axle)  
on right side plane  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

37. Type of Fuel Tank-1

1

38. Type of Fuel Tank-2

φ

- (0) No fuel tank (electrical vehicle)  
(1) Metallic  
(2) Non-metallic  
(9) Unknown

39. Location of Fuel Tank-1

5

40. Location of Fuel Tank-2

φ

- (0) No fuel tank  
(1) Aft of center of the rear wheels (rear axle)  
centered  
(2) Aft of center of the rear wheels (rear axle) left  
side  
(3) Aft of center of the rear wheels (rear axle) right  
side  
(4) Forward of center of the rear wheels (rear axle)  
centered  
(5) Forward of center of the rear wheels (rear axle)  
left side  
(6) Forward of center of the rear wheels (rear axle)  
right side  
(7) Over center of the rear wheels (rear axle)  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

41. Damage to Fuel Tank-1

1

42. Damage to Fuel Tank-2

φ

- (0) No fuel tank  
(1) No damage to fuel tank  
(2) Deformed, no seam failure  
(3) Deformed, with a seam failure  
(4) Punctured  
(5) Lacerated (ripped)  
(6) Abraded (scraped)  
(7) Filler neck separation from the fuel tank  
(8) Other damage (specify): \_\_\_\_\_  
(9) Unknown

43. Leakage Location of Fuel System-1

1

44. Leakage Location of Fuel System-2

Ø

(0) No fuel tank

(1) No fuel leakage

*Primary Area Of Leakage*

(2) Tank

(3) Filler neck

(4) Cap

(5) Lines/pump/filter

(6) Vent/emission recovery

(8) Other (specify): \_\_\_\_\_

(9) Unknown

45. Fuel Type-1

Ø 1

46. Fuel Type-2

Ø Ø*Single Fuel Type*

(00) No fuel tank

(01) Gasoline

(02) Diesel

(03) CNG (Compressed Natural Gas)

(04) LPG (Liquid Petroleum Gas) also known as Propane

(05) LNG (Liquid Natural Gas)

(06) Methanol (M100 or M85)

(07) Ethanol (E100 or E85)

(08) Other (Hydrogen or others) (specify): \_\_\_\_\_

*Electric Powered or Electric/Solar Powered Vehicles*

(10) Lead Acid Battery

(11) Nickel-Iron Battery

(12) Nickel-Cadmium Battery

(13) Sodium Metal Chloride Battery

(14) Sodium Sulfur Battery

(18) Other (Specify): \_\_\_\_\_

(98) Other Hybrid (specify): \_\_\_\_\_

(99) Unknown fuel type

47. Is This Vehicle Equipped With More Than Two Fuel Tanks?

Ø

(0) No (one or two tanks only)

*Yes - More Than Two Tanks*(1) Yes – no damage to any tank or filler cap and no fuel system leakage(2) Yes – no damage to any tank or filler cap but there is fuel system leakage (specify leakage location): \_\_\_\_\_(3) Yes – damage to an additional tank or filler cap and there is fuel system leakage (specify the following):

Type of tank \_\_\_\_\_

Tank location \_\_\_\_\_

Filler cap location \_\_\_\_\_

Tank damage \_\_\_\_\_

Location of leakage \_\_\_\_\_

Type of fuel \_\_\_\_\_

(9) Unknown if more than two tanks

**COMMENTS**


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\*\*\* STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED \*\*\*

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.





## INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number

2. Case Number - Stratum

DSI-95-SP-013

3. Vehicle Number

02

## INTEGRITY

4. Passenger Compartment Integrity

(00) No integrity loss

12

Yes, Integrity Was Lost Through

- (01) Windshield
- (02) Door (side)
- (03) Door/hatch (back door)
- (04) Roof
- (05) Roof glass
- (06) Side window
- (07) Rear window (backlight)
- (08) Roof and roof glass
- (09) Windshield and door (side)
- (10) Windshield and roof
- (11) Side and rear window (side window and backlight)
- (12) Windshield and side window
- (13) Door and side window
- (98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 1 6. RF 3 7. LR 0 8. RR 0 9. TG/H 1

- (0) No door/gate/hatch
- (1) Door/gate/hatch remained closed and operational
- (2) Door/gate/hatch came open during collision
- (3) Door/gate/hatch jammed shut
- (8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch  
Opening in Collision. If IV05-IV09 ≠ 2, Then code 010. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

- (1) Door operational (no damage)
- (2) Latch/striker failure due to damage
- (3) Hinge failure due to damage
- (4) Door structure failure due to damage
- (5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage
- (6) Latch/striker and hinge failure due to damage
- (8) Other failure (specify):

(9) Unknown

## GLAZING

Type of Window/Windshield Glazing

15. WS 1 16. LF 2 17. RF 2 18. LR 2 19. RR 2  
20. BL 2 21. Roof 2 22. Other 0

- (0) No glazing
- (1) AS-1 — Laminated
- (2) AS-2 — Tempered
- (3) AS-3 — Tempered-tinted (original)
- (4) AS-2 — Tempered-with after market tint
- (5) AS-3 — Tempered-tinted (with additional after market tint)
- (6) AS-14 — Glass/Plastic
- (7) Glazing removed prior to accident
- (8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

23. WS 1 24. LF 2 25. RF 2 26. LR 2 27. RR 2  
28. BL 1 29. Roof 2 30. Other 0

- (0) No glazing
- (1) Fixed
- (2) Closed
- (3) Partially opened
- (4) Fully opened
- (7) Glazing removed prior to accident
- (9) Unknown

Glazing Damage from Impact Forces

31. WS 4 32. LF 6 33. RF 6 34. LR 6 35. RR 1  
36. BL 1 37. Roof 1 38. Other 0

- (0) No glazing
- (1) No glazing damage from impact forces
- (2) Glazing in place and cracked from impact forces
- (3) Glazing in place and holed from impact forces
- (4) Glazing out-of-place (cracked or not) and not holed from impact forces
- (5) Glazing out-of-place and holed from impact forces
- (6) Glazing disintegrated from impact forces
- (7) Glazing removed prior to accident
- (9) Unknown if damaged

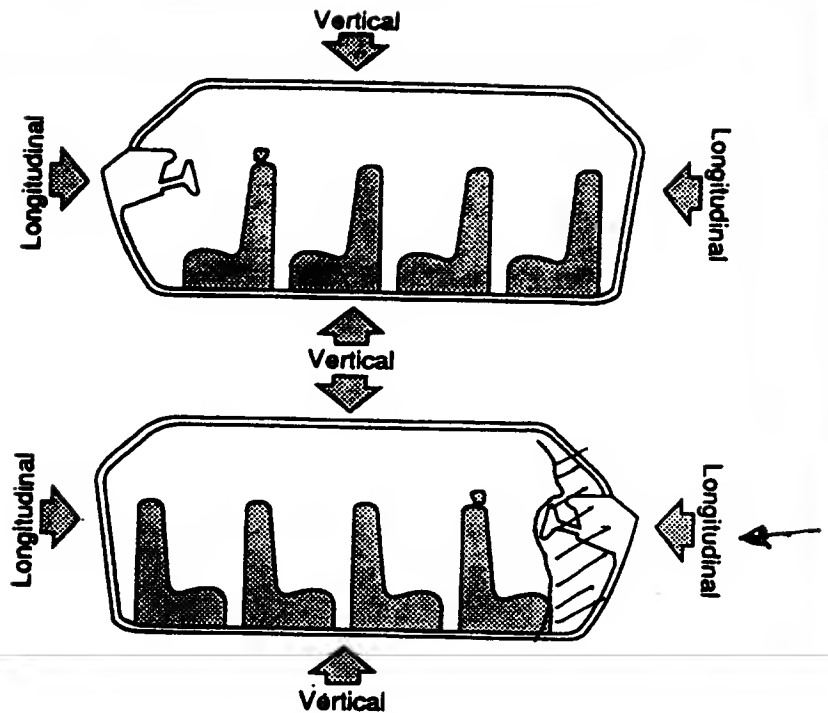
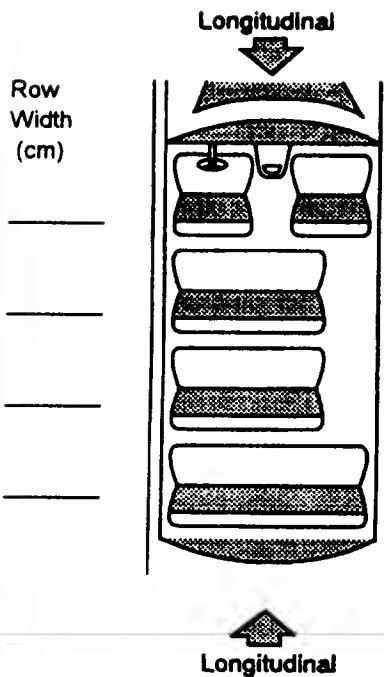
Glazing Damage from Occupant Contact

39. WS 3 40. LF 1 41. RF 1 42. LR 1 43. RR 1  
44. BL 1 45. Roof 1 46. Other 0

- (0) No glazing
- (1) No occupant contact to glazing
- (2) Glazing contacted by occupant but no glazing damage
- (3) Glazing in place and cracked by occupant contact
- (4) Glazing in place and holed by occupant contact
- (5) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact
- (6) Glazing out-of-place by occupant contact and holed by occupant contact
- (7) Glazing removed prior to accident
- (8) Glazing disintegrated by occupant contact
- (9) Unknown if contacted by occupant

# INTRUSION WORKSHEET

Note: Sketch intruded areas



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)				DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	—	INTRUDED VALUE	=	
R/SIDE	"A" PILLAR (LOWER)	103.0	—	69.0	= 34.0	LONG
R/SIDE	"A" PILLAR (TOP)	65.0	—	50.0	= 15.0	LONG
R/SIDE	INSTRUMENT PANEL	85.0	—	54.0	= 31.0	LONG
R/SIDE	SIDE PANEL	0	—	23.0	= 23.0	LAT.
			—		=	
			—		=	
			—		=	
			—		=	
			—		=	
			—		=	
			—		=	
			—		=	
			—		=	
			—		=	
			—		=	
			—		=	

Document no more than the 15 most severe intrusions

## OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

## INTRUDING COMPONENT

## Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Side panel - forward of the A1/A2-pillar
- (11) Door panel (side)
- (12) Side panel - rear of the B-pillar
- (13) Roof (or convertible top)
- (14) Roof side rail
- (15) Windshield
- (16) Windshield header
- (17) Window frame
- (18) Floor pan (includes sill)
- (19) Backlight header
- (20) Front seat back
- (21) Second seat back
- (22) Third seat back
- (23) Fourth seat back
- (24) Fifth seat back
- (25) Seat cushion
- (26) Back door/panel (e.g., tailgate)
- (27) Other interior component (specify):

## Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify):
- (32) Other exterior object in the environment (specify):
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify):
- (99) Unknown

## LOCATION OF INTRUSION

## Front Seat

- (11) Left
- (12) Middle
- (13) Right

## Fourth Seat

- (41) Left
- (42) Middle
- (43) Right

## Second Seat

- (21) Left
- (22) Middle
- (23) Right

- (97) Catastrophic
- (98) Other enclosed area (specify)

(99) Unknown

## Third Seat

- (31) Left
- (32) Middle
- (33) Right

## MAGNITUDE OF INTRUSION

- (1)  $\geq 3$  centimeters but  $< 8$  centimeters
- (2)  $\geq 8$  centimeters but  $< 15$  centimeters
- (3)  $\geq 15$  centimeters but  $< 30$  centimeters
- (4)  $\geq 30$  centimeters but  $< 46$  centimeters
- (5)  $\geq 46$  centimeters but  $< 61$  centimeters
- (6)  $\geq 61$  centimeters
- (7) Catastrophic
- (9) Unknown

## DOMINANT CRUSH DIRECTION

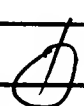

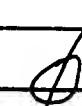
- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. <u>2 3</u>	48. <u>06</u>	49. <u>4</u>	50. <u>2</u>
2nd	51. <u>2 3</u>	52. <u>04</u>	53. <u>4</u>	54. <u>2</u>
3rd	55. <u>2 3</u>	56. <u>1 0</u>	57. <u>3</u>	58. <u>3</u>
4th	59. <u>2 3</u>	60. <u>06</u>	61. <u>2</u>	62. <u>2</u>
5th	63. _____	64. _____	65. _____	66. _____
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

## STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE — DAMAGE VALUE = DEFORMATION

	—		=	
	—		=	
	—		=	
	—		=	
	—		=	

## STEERING COLUMN

## INSTRUMENT PANEL

87. Steering Column Type 2

- (1) Fixed column  
 (2) Tilt column  
 (3) Telescoping column  
 (4) Tilt and telescoping column  
 (8) Other column type (specify): \_\_\_\_\_  
 (9) Unknown

88. Tilt Steering Column Adjustment 9

- (0) No tilt steering column  
 (1) Full up  
 (2) Between full up and center  
 (3) Center  
 (4) Between center and full down  
 (5) Full down  
 (9) Unknown

89. Telescoping Steering Column Adjustment Ø

- (0) No telescoping steering column  
 (1) Full back  
 (2) Between full back and midpoint  
 (3) Midpoint  
 (4) Between midpoint and full forward  
 (5) Full forward  
 (9) Unknown

90. Steering Rim/Spoke Deformation Ø Ø

- Code actual measured  
 deformation to the nearest centimeter  
 (00) No steering rim deformation  
 (01-14) Actual measured value in centimeters  
 (15) 15 centimeters or more  
 (98) Observed deformation cannot be measured  
 (99) Unknown

91. Location of Steering Rim/Spoke Deformation Ø Ø

- (00) No steering rim deformation

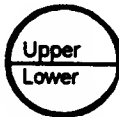
## Quarter Sections

- (01) Section A  
 (02) Section B  
 (03) Section C  
 (04) Section D



## Half Sections

- (05) Upper half of rim/spoke  
 (06) Lower half of rim/spoke  
 (07) Left half of rim/spoke  
 (08) Right half of rim/spoke  
 (09) Complete steering wheel collapse  
 (10) Undetermined location  
 (99) Unknown

92. Odometer Reading 999,000

- \_\_\_\_\_ kilometers  
 Code to the nearest 1,000 kilometers  
 (000) No odometer  
 (001) Less than 1,500 kilometers  
 (500) 499,500 kilometers or more  
 (999) Unknown

\_\_\_\_\_ miles X 1.6093 = \_\_\_\_\_ kilometers

Source: INSPECTION / UNABLE TO READ93. Instrument Panel Damage from Occupant Contact? 1

- (0) No  
 (1) Yes  
 (9) Unknown

94. Type of Knee Bolster Covering 2

- (0) No knee bolster  
 (1) Padded  
 (2) Rigid plastic  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

95. Knee Bolsters Deformed from Occupant Contact? 2

- (0) No knee bolster  
 (1) No deformation  
 (2) Yes - deformation  
 (9) Unknown

96. Did Glove Compartment Door Open During Collision(s)? 2

- (0) No glove compartment door  
 (1) No - door did not open  
 (2) Yes - door opened  
 (9) Unknown

97. Adaptive (Assistive) Driving Equipment Ø

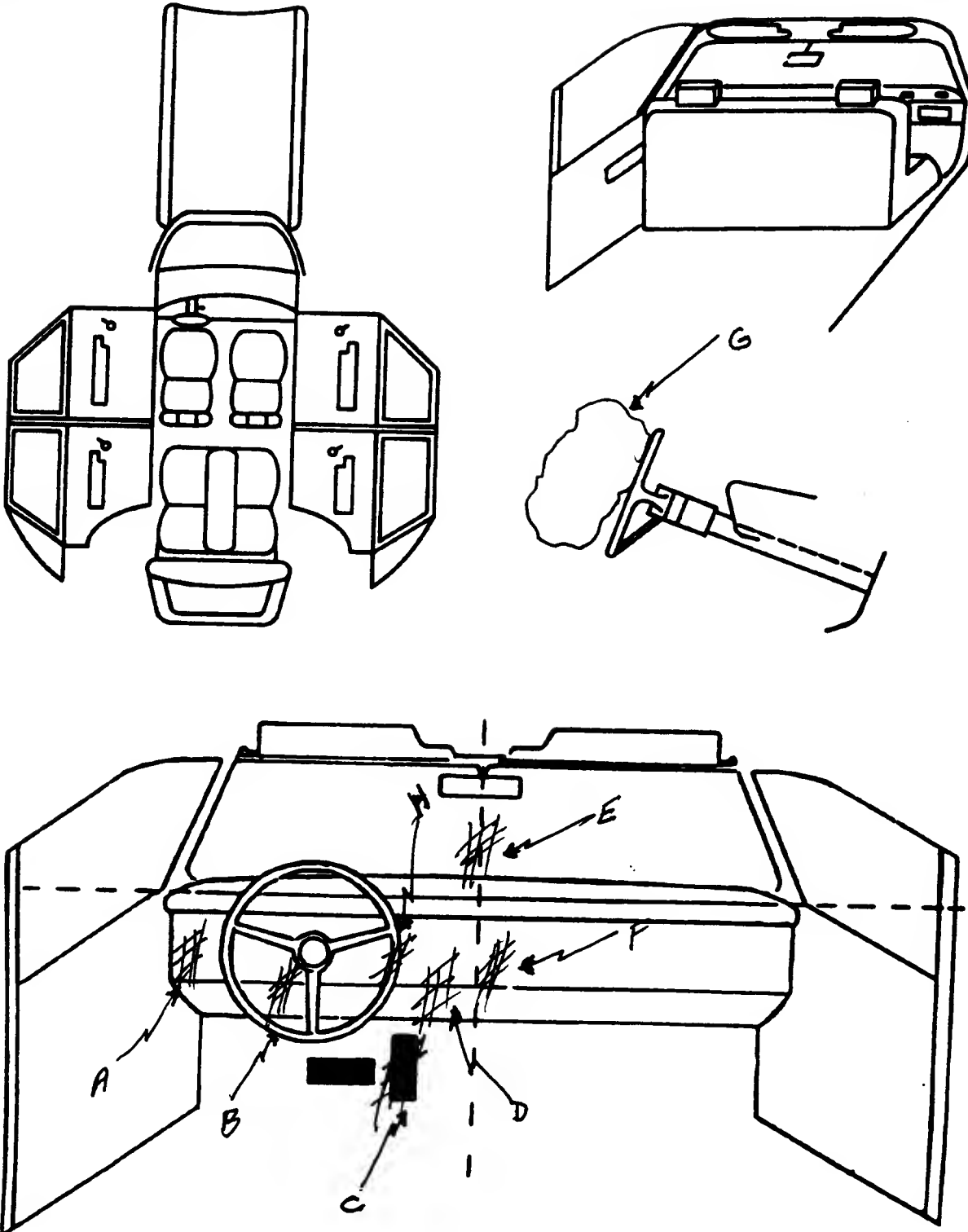
- (0) No adaptive driving equipment  
 (1) Adaptive driving equipment installed (Check all that apply.)  
☐ Hand controls for braking/acceleration  
☐ Steering control devices (attached to OEM steering wheel)  
☐ Steering knob attached to steering wheel  
☐ Low effort power steering (unit or device)  
☐ Replacement steering wheel (i.e., reduced diameter)  
☐ Joy-stick steering controls  
☐ Wheelchair tie-downs  
☐ Modification to seat belts (specify): \_\_\_\_\_  
☐ Additional or relocated switches (specify): \_\_\_\_\_  
☐ Raised roof  
☐ Wall-mounted head rest (used behind wheelchair)  
☐ Other adaptive device (specify): \_\_\_\_\_

(9) Unknown



## VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

## POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	Φ1Φ	Φ1	KNEE	CRACKED / DISPLACED	3
B	ΦΦ7	Φ1	KNEE/LEG	DISPLACED	3
C	254	Φ1	R FOOT	DISPLACED	2
D	Φ1Φ	Φ1	KNEE	CRACKED / DISPLACED	1
E	ΦΦ1	Φ1	HEAD	HAIR / CRACKED	1
F	Φ11	Φ1	WINK	CRACKED / DISPLACED	2
G	17Φ	Φ1	CHEST	DEPLOYED	1
H	ΦΦ4	Φ1	R HAND	TRANSFER	2
I					
J					
K					
L					
M					
N					

## FRONT

- (001) Windshield  
 (002) Mirror  
 (003) Sunvisor  
 (004) Steering wheel rim  
 (005) Steering wheel hub/spoke  
 (006) Steering wheel (combination of codes 004 and 005)  
 (007) Steering column, transmission selector lever, other attachment  
 (008) Cellular telephone or CB radio  
 (009) Add on equipment (e.g., tape deck, air conditioner)  
 (010) Left instrument panel and below  
 (011) Center instrument panel and below  
 (012) Right instrument panel and below  
 (013) Glove compartment door  
 (014) Knee bolster  
 (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)  
 (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)  
 (017) Windshield reinforced by exterior object, (specify):  
 (019) Other front object (specify):

## CODES FOR INTERIOR COMPONENTS

## LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests  
 (052) Left side hardware or armrest  
 (053) Left A (A1/A2)-pillar  
 (054) Left B-pillar  
 (055) Other left pillar (specify):  
 (056) Left side window glass  
 (057) Left side window frame  
 (058) Left side window sill  
 (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (060) Other left side object (specify):

## RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests  
 (102) Right side hardware or armrest  
 (103) Right A (A1/A2)-pillar  
 (104) Right B-pillar  
 (105) Other right pillar (specify):  
 (106) Right side window glass  
 (107) Right side window frame  
 (108) Right side window sill  
 (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (110) Other right side object (specify):

## INTERIOR

- (151) Seat, back support  
 (152) Belt restraint webbing/buckle  
 (153) Belt restraint B-pillar or door frame attachment point  
 (154) Other restraint system component (specify):  
 (155) Head restraint system  
 (160) Other occupants (specify):  
 (161) Interior loose objects  
 (162) Child safety seat (specify):  
 (163) Other interior object (specify):

## AIR BAG

- (170) Air bag-driver side  
 (175) Air bag compartment cover-driver side  
 (180) Air bag-passenger side  
 (185) Air bag compartment cover-passenger side  
 (190) Other air bag (specify):  
 (195) Other air bag compartment cover (specify):

## ROOF

- (201) Front header  
 (202) Rear header  
 (203) Roof left side rail  
 (204) Roof right side rail  
 (205) Roof or convertible top

## FLOOR

- (251) Floor (including toe pan)  
 (252) Floor or console mounted transmission lever, including console  
 (253) Parking brake handle  
 (254) Foot controls including parking brake

## REAR

- (301) Backlight (rear window)  
 (302) Backlight storage rack, door, etc.  
 (303) Other rear object (specify):

## ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration  
 (402) Steering control devices (attached to OEM steering wheel)  
 (403) Steering knob attached to steering wheel  
 (405) Replacement steering wheel (i.e., reduced diameter)  
 (406) Joy stick steering controls  
 (407) Wheelchair tie-downs  
 (408) Modification to seat belts, (specify):  
 (409) Additional or relocated switches, (specify):  
 (410) Raised roof  
 (411) Wall mounted head rest (used behind wheel chair)  
 (412) Other adaptive device (specify):

## CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain  
 (2) Probable  
 (3) Possible  
 (9) Unknown

# MANUAL RESTRAINTS

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4	0	4
	Evidence of usage	04	00	04
	Used in this crash?	00	00	00
	Proper Use	0	0	0
	Failure Modes	0	0	0
	Anchorage Adjustment	1	0	1
SECOND	Availability	4	3	4
	Evidence of usage	00	00	00
	Used in this crash?	00	00	00
	Proper Use	0	0	0
	Failure Modes	0	0	0
	Anchorage Adjustment	1	0	1
OTHER	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			
	Anchorage Adjustment			

## Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

### Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown

## Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

### Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):
- (8) Other improper use of manual belt system (specify):

(9) Unknown

## Shoulder Belt Upper Anchorage Adjustment

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

### Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

## Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify):
- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

## Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):
- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other manual belt failure (specify):
- (9) Unknown

## AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

## AIR BAGS

		Left Front	Right Front	Other
F I R S T	Availability/Function	/	Ø	Ø
	Deployment	/	Ø	Ø
	Failure	/	Ø	Ø

## Air Bag System Availability/Function

- (0) Not equipped/not available  
(1) Air bag

## Non-functional

- (2) Air bag disconnected (specify):  
\_\_\_\_\_  
(3) Air bag not reinstalled  
(9) Unknown

## Are There Indications of Air Bag System Failure? (This Occupant Position)

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify):  
\_\_\_\_\_  
(9) Unknown

## Frontal Air Bag System Deployment (This Occupant Position)

- (0) Not equipped/not available  
(1) Deployed during accident (as a result of impact)  
(2) Deployed inadvertently just prior to accident  
(3) Deployed, accident sequence undetermined  
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(5) Unknown if deployed  
(7) Nondeployed  
(9) Unknown

## Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position)

- (0) Not equipped with an "other" air bag  
(1) Deployed during accident (as a result of impact)  
(2) Deployed inadvertently just prior to accident  
(3) Deployed, details unknown  
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(5) Unknown if deployed  
(7) Nondeployed  
(9) Unknown

## AUTOMATIC BELTS

		Left	Right
F I R S T	Availability/Function	/	/
	Use	Ø	Ø
	Type	/	/
	Proper Use	/	/
	Failure Modes	/	/

## Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available  
(1) 2 point automatic belts  
(2) 3 point automatic belts  
(3) Automatic belts - type unknown

## Non-functional

- (4) Automatic belts destroyed or rendered inoperative  
(9) Unknown

## Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Automatic belt in use  
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)  
(3) Automatic belt use unknown  
(9) Unknown

## Automatic (Passive) Belt System Type

- (0) Not equipped/not available  
(1) Non-motorized system  
(2) Motorized system  
(9) Unknown

## Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used  
(1) Automatic belt used properly  
(2) Automatic belt used properly with child safety seat

## Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm  
(4) Automatic shoulder belt worn behind back  
(5) Automatic belt worn around more than one person  
(6) Lap portion of automatic belt worn on abdomen  
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):  
\_\_\_\_\_

- (8) Other improper use of automatic belt system (specify):  
\_\_\_\_\_  
(9) Unknown

## Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use  
(1) No automatic belt failure(s)  
(2) Torn webbing (stretched webbing not included)  
(3) Broken buckle or latchplate  
(4) Upper anchorage separated  
(5) Other anchorage separated (specify):  
\_\_\_\_\_

- (6) Broken retractor  
(7) Combination of above (specify):  
\_\_\_\_\_  
(8) Other automatic belt failure (specify):  
\_\_\_\_\_  
(9) Unknown

# FIRST SEAT FRONTAL AIR BAGS

BEST AVAILABLE

NOTES: Encode the applicable data for the driver and first seat passenger in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
Type of air bag?	1	
Flaps open at tear points?	2	
Flaps damaged?	1	
Air bag damaged?	01	
Source of air bag damage	01	
Air bag tethered?	2	
Air bag have vent ports?	2	
Other occupant contact air bag?	0	
Occupant wearing eyewear?	9	

## Type of Air Bag

- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

## Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (0) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Was There Damage To The Air Bag?

- (00) Not equipped/not available
- (01) Not damaged

### Yes - Air Bag Damage

- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify):

- (95) Damaged, details unknown
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

## Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify):
- (03) Object carried by occupant, (specify):
- (04) Adaptive/assistive controls, (specify):
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify):

- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

## Was The Air Bag Tethered?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps):

- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Did The Air Bag Have Vent Ports?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports):
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

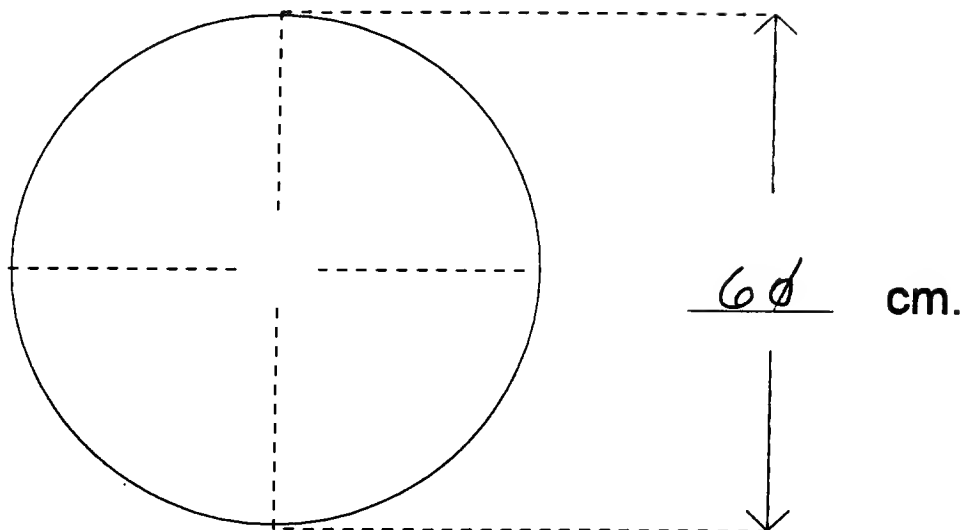
## Was This Occupant Wearing Eye-wear?

- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

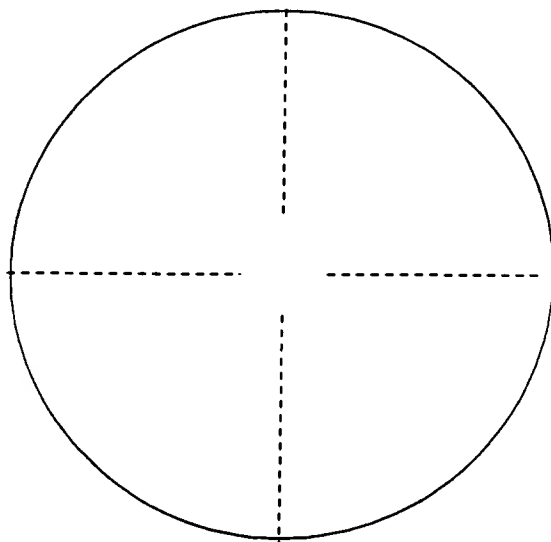


## DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES

## 1. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Front)



## 2. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)

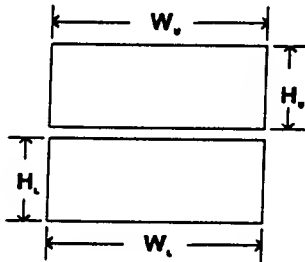


## DRIVER AIR BAG SKETCHES (Cont'd)

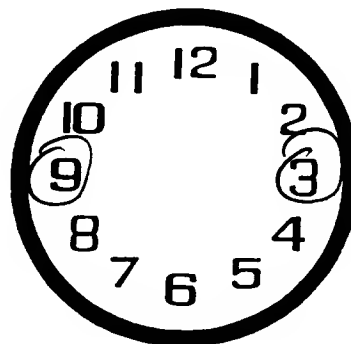
3. DRIVER AIR BAG MODULE COVER FLAP SIZE  
(DOUBLE)

a. Upper Flap

b. Lower Flap

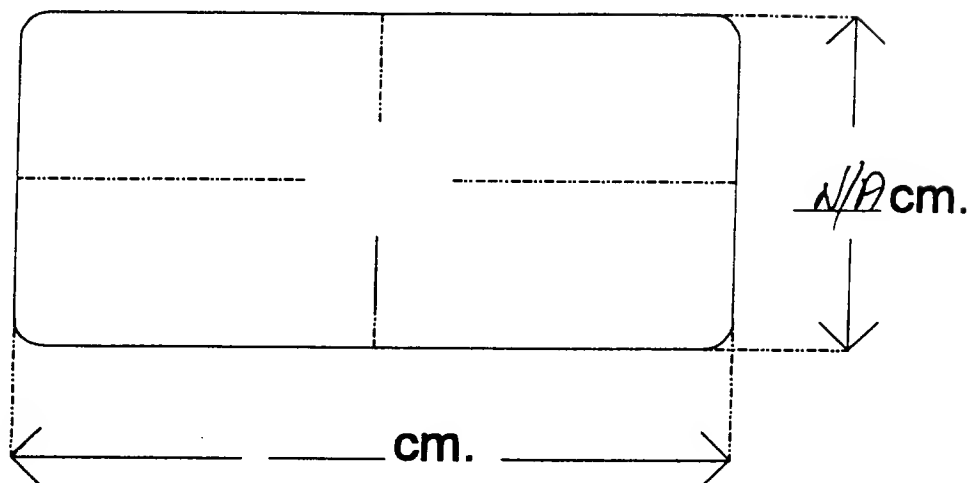
width ( $W_U$ ) 17width ( $W_L$ ) 7height ( $H_U$ ) 17height ( $H_L$ ) 74. SKETCH OF OTHER TYPE OF AIR BAG MODULE  
FLAP AND SIZE

## 5. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

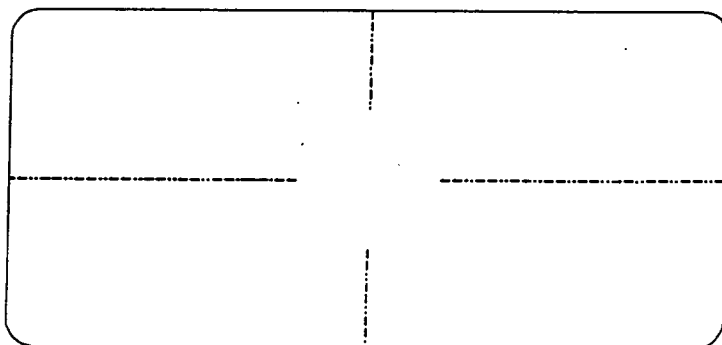
6. SKETCH LOCATION OF CIRCULAR AIR BAG VENT  
PORTS

## PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES

## 1. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Front)



## 2. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Back)



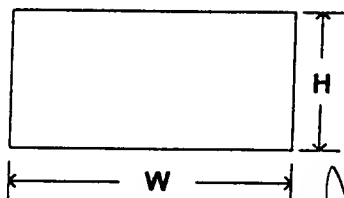
## PASSENGER AIR BAG SKETCHES (Cont'd)

## 3. PASSENGER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

a. Flap

width (W) \_\_\_\_\_

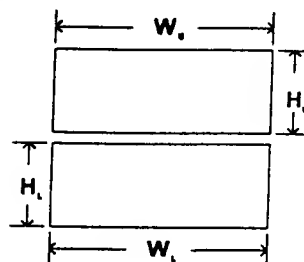
height (H) \_\_\_\_\_



## 4. PASSENGER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

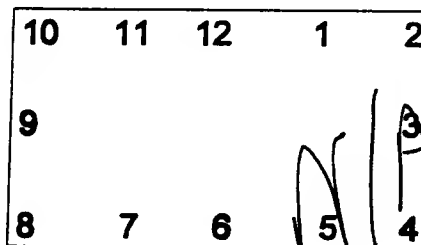
b. Lower Flap

width ( $W_U$ ) \_\_\_\_\_width ( $W_L$ ) \_\_\_\_\_height ( $H_U$ ) \_\_\_\_\_height ( $H_L$ ) \_\_\_\_\_

## 5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

## 6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

## 7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS



## HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	3	/	3
	Seat Type	02		02
	Seat Performance	1		1
	Seat Orientation	1		1
	Seat Track Position	9		9
	Seat Back Incline Pre/Post Impact	9		9
SECOND	Head Restraint Type/Damage	7	0	1
	Seat Type	05	05	05
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
	Seat Track Position	01	01	01
	Seat Back Incline Pre/Post Impact	01	01	01
THIRD	Head Restraint Type/Damage			
	Seat Type	/	/	/
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			
OTHER	Head Restraint Type/Damage			/
	Seat Type	/	/	/
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE  
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)



## HEAD RESTRAINTS/SEAT EVALUATION

**Head Restraint Type/Damage by Occupant at This Occupant Position**

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other  
Specify: \_\_\_\_\_
- (9) Unknown

**Seat Performance (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**Seat Back Incline Prior and Post Impact**

- (00) Occupant not seated or no seat
- (01) Not adjustable
- Upright prior to impact*
- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position
- Slightly reclined prior to impact*
- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position

**Seat Type (this Occupant Position)**

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

**Seat Orientation (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**Seat Track Adjusted Position Prior To Impact**

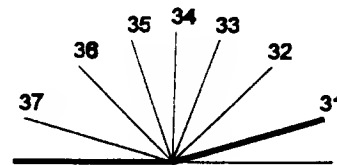
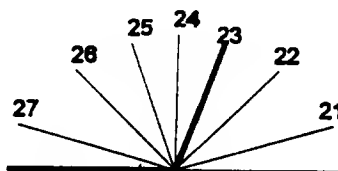
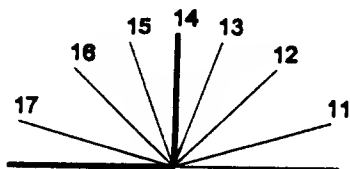
- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track

**Adjustable Seat Track**

- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

**Completely reclined prior to impact**

- (31) Retained pre-impact position
- (32) Moved to rearward midrange position
- (33) Moved to slightly rearward position
- (34) Moved to upright position
- (35) Moved to slightly forward position
- (36) Moved to forward midrange position
- (37) Moved to completely forward position
- (99) Unknown



Coding diagrams for Seat Back Incline Position Prior and Post Impact

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE  
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

## CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

## 1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

## 2. Child Safety Seat Orientation

- (00) No child safety seat

Designed for Rear Facing for This Age/Weight

- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):

- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation

- (99) Unknown if child safety seat used

## 3. Child Safety Seat Harness Usage

## 4. Child Safety Seat Shield Usage

## 5. Child Safety Seat Tether Usage

Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

## 6. Child Safety Seat Make/Model

(Specify make/model and occupant number)

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## EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION No [ ☒ ] Yes [ ☐ ]

Describe indications of ejection and body parts involved in partial ejection(s):

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Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

## Ejection

- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

## Ejection Area

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

## (7) Roof

(8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown

## Ejection Medium

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

## (5) Integral structure

(8) Other medium (specify):

(9) Unknown

## Medium Status (Immediately Prior to Impact)

- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

ENTRAPMENT No [ ☒ ] Yes [ ☐ ]

Describe entrapment mechanism: \_\_\_\_\_

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Component(s): \_\_\_\_\_

(Note in vehicle interior diagram)

National Highway Traffic Safety  
AdministrationNATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

4. Occupant Number

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

Code actual height to the nearest  
centimeter.

(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

8. Occupant's Weight

Code actual weight to the nearest  
kilogram.

(999) Unknown

\_\_\_\_\_ pounds X .4536 = \_\_\_\_\_ kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

## OCCUPANT'S SEATING

10. Occupant's Seat Position

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify): \_\_\_\_\_

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify): \_\_\_\_\_

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify): \_\_\_\_\_

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify): \_\_\_\_\_

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify): \_\_\_\_\_

(99) Unknown

11. Occupant's Posture

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front of  
seat

(8) Other abnormal posture (specify): \_\_\_\_\_

(9) Unknown

BEST AVAILABLE

## EJECTION/ENTRAPMENT

12. Ejection Ø

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) Ø

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

13. Ejection Area Ø

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

16. Entrapment Ø

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_

\_\_\_\_\_  
(9) Unknown

14. Ejection Medium Ø

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_

- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_

\_\_\_\_\_  
(9) Unknown

17. Occupant Mobility 2

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or disoriented
- (2) Removed from vehicle due to injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (9) Unknown



## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): \_\_\_\_\_

(9) Unknown

19. Manual (Active) Belt System Use 00

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): \_\_\_\_\_

(02) Shoulder belt

(03) Lap belt

(04) Lap and shoulder belt

(05) Belt used—type unknown

(08) Other belt used (specify): \_\_\_\_\_

(12) Shoulder belt used with child safety seat

(13) Lap belt used with child safety seat

(14) Lap and shoulder belt used with child safety seat

(15) Belt used with child safety seat—type unknown

(18) Other belt used with child safety seat (specify): \_\_\_\_\_

(99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 0

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident 0

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor

(7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown

22. Shoulder Belt Upper Anchorage Adjustment 1

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): \_\_\_\_\_
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of automatic belt system (specify): \_\_\_\_\_

(9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor

(7) Combination of above (specify): \_\_\_\_\_

(8) Other automatic belt failure (specify): \_\_\_\_\_

(9) Unknown

## POLICE REPORTED RESTRAINT USE

28. Police Reported Belt Use 9

- (0) None used  
 (1) Police did not indicate belt use  
 (2) Shoulder belt  
 (3) Lap belt  
 (4) Lap and shoulder belt  
 (5) Belt used, type not specified  
 (6) Child safety seat  
 (7) Automatic belt  
 (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 1

- (0) No air bag available  
 (1) Police did not indicate air bag availability/function  
 (2) Deployed  
 (3) Not deployed  
 (4) Unknown if deployed  
 (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- [ ] Not equipped/not available/destroyed or rendered inoperative  
☒ Vehicle inspection  
 [ ] Official injury data  
 [ ] Driver/occupant interview  
 [ ] Other (specify):

[ ] Unknown if belt used

## AIR BAG SYSTEM FUNCTION

30. Frontal Air Bag System 1

- Availability/Function  
 (This Occupant Position)  
 (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):  
 (3) Air bag not reinstalled  
 (9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) 1

- (0) Not equipped/not available  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function 0

- (This Occupant Position)  
 (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):  
 (3) Air bag not reinstalled  
 (9) Unknown

*Specify type of "other" air bag present:*

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0

- (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

34. Are There Indications of Air Bag System Failure? 1

- (This Occupant Position)  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 (9) Unknown

## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 1  
 (0) Not equipped/not available  
 (1) No previous accidents  
 Yes  
 (2) Previous accident(s) without deployment(s)  
 (3) One previous accident with deployment  
 (4) More than one previous accident with at least one deployment  
 (8) Previous accidents, unknown deployment status  
 (9) Unknown
36. Type of Air Bag 1  
 (0) Not equipped/not available  
 (1) Original manufacturer installed system  
 (2) Retrofitted air bag  
 (3) Replacement air bag  
 (8) Unknown type of air bag  
 (9) Unknown
37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 9  
 (0) Not equipped/not available  
 (1) No prior maintenance  
 (2) Yes, prior maintenance (specify): \_\_\_\_\_  
 (9) Unknown
38. Air Bag Deployment Accident Event Sequence Number 01  
 (00) Not equipped/not available  
 \_\_\_\_\_ Code the accident event sequence number that initiated the air bag deployment  
 (96) Deployed, unknown event  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown
39. CDC For Air Bag Deployment Impact 1  
 (0) Not equipped/not available  
 (1) Highest delta V  
 (2) Second highest delta V  
 (3) Other non-coded delta V (specify): \_\_\_\_\_  
 (6) Deployed, unknown event  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
40. Longitudinal Component of Delta V For Air Bag Deployment Impact + 0087  
 (-000) Not equipped/not available  
*Code the value of the delta V for the impact that initiated the air bag deployment*  
 (-996) Deployment, unknown longitudinal Delta V  
 (-997) Not deployed  
 (-998) Unknown if deployed  
 (-999) Unknown
41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 2  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes  
 (3) Deployed, unknown if flap(s) opened at designated tear points  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
42. Were Air Bag Module Cover Flap(s) Damaged? 1  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify): \_\_\_\_\_  
 (3) Deployed, unknown if air bag module cover flap(s) damaged  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
43. Was There Damage To The Air Bag? 01  
 (00) Not equipped/not available  
 (01) Not damaged  
 Yes - Air Bag Damage  
 (02) Ruptured  
 (03) Cut  
 (04) Torn  
 (05) Holed  
 (06) Burned  
 (07) Abraded  
 (88) Other damage (specify): \_\_\_\_\_  
 (95) Damaged, details unknown  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION *continued*

## HEAD RESTRAINT AND SEAT EVALUATION

44. Source of Air Bag Damage 01  
 (00) Not equipped/not available  
 (01) Not damaged  
 (02) Object worn by occupant, (specify):  
 \_\_\_\_\_  
 (03) Object carried by occupant, (specify):  
 \_\_\_\_\_  
 (04) Adaptive/assistive controls, (specify):  
 \_\_\_\_\_  
 (05) Fire in vehicle  
 (06) Thermal burns  
 (07) Rescue or emergency efforts  
 (08) Other damage source (specify):  
 \_\_\_\_\_  
 (95) Damaged, unknown source  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown
45. Was The Air Bag Tethered? 2  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps):  
 \_\_\_\_\_  
 (3) Deployed, unknown if tethered  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 2  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports):  
 \_\_\_\_\_  
 (3) Deployed, unknown if vent ports present  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 1  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 \_\_\_\_\_  
 (3) Deployed, unknown if other occupant contact to air bag  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 9  
 (0) Not equipped/not available  
 (1) No  
 (2) Eyeglasses/sunglasses  
 (3) Contact lenses  
 (4) Deployed, unknown if eyewear worn  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

49. Head Restraint Type/Damage by Occupant at This Occupant Position 3  
 (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown
50. Seat Type (this Occupant Position) 02  
 (00) Occupant not seated or no seat  
 (01) Bucket  
 (02) Bucket with folding back  
 (03) Bench  
 (04) Bench with separate back cushions  
 (05) Bench with folding back(s)  
 (06) Split bench with separate back cushions  
 (07) Split bench with folding back(s)  
 (08) Pedestal (i.e., column supported)  
 (09) Box mounted seat (i.e., van type)  
 (10) Other seat type (specify):  
 \_\_\_\_\_  
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1  
 (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 9  
 (0) Occupant not seated or no seat  
 (1) Non-adjustable seat track
- Adjustable Seat Track*  
 (2) Seat at forward most track position  
 (3) Seat between forward most and middle track positions  
 (4) Seat at middle track position  
 (5) Seat between middle and rear most track positions  
 (6) Seat at rear most track position  
 (9) Unknown

BEST AVAILABLE

HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 9 9

(00) Occupant not seated or no seat

(01) Not adjustable

*Upright prior to impact*

(11) Moved to completely rearward position

(12) Moved to rearward midrange position

(13) Moved to slightly rearward position

(14) Retained pre-impact position

(15) Moved to slightly forward position

(16) Moved to forward midrange position

(17) Moved to completely forward position

*Slightly reclined prior to impact*

(21) Moved to completely rearward position

(22) Moved to rearward midrange position

(23) Retained pre-impact position

(24) Moved to upright position

(25) Moved to slightly forward position

(26) Moved to forward midrange position

(27) Moved to completely forward position

*Completely reclined prior to impact*

(31) Retained pre-impact position

(32) Moved to rearward midrange position

(33) Moved to slightly rearward position

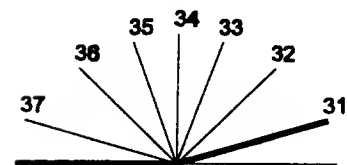
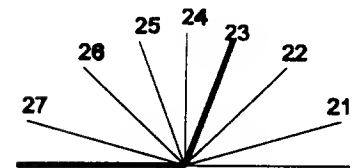
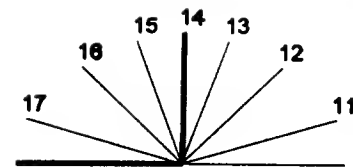
(34) Moved to upright position

(35) Moved to slightly forward position

(36) Moved to forward midrange position

(37) Moved to completely forward position

(99) Unknown

54. Seat Performance (this Occupant Position) 1

(0) Occupant not seated or no seat

(1) No seat performance failure(s)

(2) Seat adjusters failed

(3) Seat back folding locks or "seat back" failed

(specify): \_\_\_\_\_

(4) Seat track/anchors failed

(5) Deformed by impact of occupant

(6) Deformed by passenger compartment intrusion,  
(specify): \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other (specify): \_\_\_\_\_

(9) Unknown



## CHILD SAFETY SEAT

55. Child Safety Seat Make/Model φ φ φ

(000) No child safety seat

Applicable codes are found in your NASS CDS

Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat φ

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation φ φ

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage φ φ59. Child Safety Seat Shield Usage φ φ60. Child Safety Seat Tether Usage φ φ

Note: Options below applicable to Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

(01) After market harness/shield/tether added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market harness/shield/tether added

(09) Unknown if harness/shield/tether added or used

*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES**61. Injury Severity (Police Rating) 9

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality 3

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):  
\_\_\_\_\_

- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 1

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_

(9) Unknown

64. Hospital Stay 99

(00) Not Hospitalized

Code the number of days (up through 60) that the occupant stayed in hospital.

- (61) 61 days or more
- (99) Unknown

65. Working Days Lost 99

Code the number of days (up through 60) that the occupant lost from work due to the accident

- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

99. Case Occupant 1

- (0) Not the Case Occupant
- (1) This is the Case Occupant
- (2) This is the Case Occupant in another case.

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES****TRAUMA DATA**

## 66. Time to Death

0 0

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

## 67. 1st Medically Reported Cause of Death

0 0

## 68. 2nd Medically Reported Cause of Death

0 0

## 69. 3rd Medically Reported Cause of Death

0 0

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes  
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

## 70. Number of Recorded Injuries for This Occupant

0 7

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

## 71. Glasgow Coma Scale (GCS) Score (at Medical Facility)

9 7

- (00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured

## 72. Was the Occupant Given Blood?

9

(1) No - blood not given

(2) Yes - blood given

(specify units):

(9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub>0 1

- (00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the HCO<sub>3</sub>  
(96) ABGs reported, HCO<sub>3</sub> unknown  
(97) Injured, details unknown  
(99) Unknown if injured

**BELT USE DETERMINATION**

## 74. Primary Source of Belt Use Determination

1

(0) Not equipped/not available/destroyed or rendered inoperative

(1) Vehicle inspection

(2) Official injury data

(3) Driver/occupant interview

(8) Other (specify):

(9) Unknown if belt used



U.S. Department of Transportation

National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

BEST AVAILABLE Form Approved  
O.M.B. No. 2127-002  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number \_\_\_\_\_

3. Vehicle Number 022. Case Number - Stratum DS1-95-SP-0134. Occupant Number 01

## INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	A.I.S. - 90					Injury Source Confidence Level	Occupant Direct/ Indirect Injury	Area Intrusion Number	ICD-9			
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity							
1st	5. <u>2</u>	6. <u>1</u>	7. <u>6</u>	8. <u>02</u>	9. <u>02</u>	10. <u>2</u>	11. <u>0</u>	12. <u>001</u>	13. <u>1</u>	14. <u>1</u>	15. <u>00</u>	<u>850.1</u>
2nd	16. <u>2</u>	17. <u>1</u>	18. <u>4</u>	19. <u>06</u>	20. <u>84</u>	21. <u>3</u>	22. <u>1</u>	23. <u>001</u>	24. <u>1</u>	25. <u>1</u>	26. <u>00</u>	<u>852.0</u>
3rd	27. <u>2</u>	28. <u>5</u>	29. <u>9</u>	30. <u>04</u>	31. <u>02</u>	32. <u>1</u>	33. <u>2</u>	34. <u>170</u>	35. <u>1</u>	36. <u>1</u>	37. <u>00</u>	<u>922.2</u>
4th	38. <u>2</u>	39. <u>8</u>	40. <u>9</u>	41. <u>02</u>	42. <u>02</u>	43. <u>1</u>	44. <u>1</u>	45. <u>011</u>	46. <u>1</u>	47. <u>1</u>	48. <u>00</u>	<u>916.0</u>
5th	49. <u>2</u>	50. <u>8</u>	51. <u>9</u>	52. <u>04</u>	53. <u>02</u>	54. <u>1</u>	55. <u>1</u>	56. <u>011</u>	57. <u>1</u>	58. <u>1</u>	59. <u>00</u>	<u>924.11</u>
6th	60. <u>2</u>	61. <u>8</u>	62. <u>9</u>	63. <u>06</u>	64. <u>02</u>	65. <u>1</u>	66. <u>1</u>	67. <u>011</u>	68. <u>1</u>	69. <u>1</u>	70. <u>00</u>	<u>891.0</u>
7th	71. <u>2</u>	72. <u>8</u>	73. <u>5</u>	74. <u>26</u>	75. <u>02</u>	76. <u>2</u>	77. <u>1</u>	78. <u>252</u>	79. <u>1</u>	80. <u>1</u>	81. <u>00</u>	<u>808.0</u>
8th	82. _____	83. _____	84. _____	85. _____	86. _____	87. _____	88. _____	89. _____	90. _____	91. _____	92. _____	_____
9th	93. _____	94. _____	95. _____	96. _____	97. _____	98. _____	99. _____	100. _____	101. _____	102. _____	103. _____	_____
10th	104. _____	105. _____	106. _____	107. _____	108. _____	109. _____	110. _____	111. _____	112. _____	113. _____	114. _____	_____

## OCCUPANT INJURY CLASSIFICATION

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.	(1) Right
(2) Face			(2) Left
(3) Neck	<u>Vessels, Nerves, Organs.</u>	To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.	(3) Bilateral
(4) Thorax	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(4) Central
(5) Abdomen		The exceptions to this rule apply to:	(5) Anterior
(6) Spine			(6) Posterior
(7) Upper Extremity			(7) Superior
(8) Lower Extremity			(8) Inferior
(9) Unspecified			(9) Unknown
			(0) Whole region
Type of Anatomic Structure	<u>Whole Area</u>		
	(02) Skin - Abrasion		
(1) Whole Area	(04) Skin - Contusion	<b>Abbreviated Injury Scale</b>	
(2) Vessels	(06) Skin - Laceration		
(3) Nerves	(08) Skin - Avulsion		
(4) Organs (includes Muscles/ligaments)	(10) Amputation		
(5) Skeletal (includes joints)	(20) Burn		
(6) Head - LOC	(30) Crush		
(9) Skin	(40) Degloving		
	(50) Injury - NFS		
	(90) Trauma, other than mechanical		
	<u>Head - LOC</u>		
	(02) Length of LOC	(1) Minor Injury	
	(04) Level	(2) Moderate Injury	
	(06) of	(3) Serious Injury	
	(08) Consciousness	(4) Severe Injury	
	(10) Concussion	(5) Critical Injury	
	<u>Spine</u>	(6) Maximum (untreatable)	
	(02) Cervical	(7) Injured, unknown severity	
	(04) Thoracic		
	(06) Lumbar		

## SOURCE OF INJURY DATA

## INJURY SOURCE

## DIRECT/INDIRECT INJURY

## CONFIDENCE LEVEL

OFFICIAL RECORDS

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL RECORDS

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): \_\_\_\_\_
- (9) Police

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source



## INJURY SOURCES

### FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (019) Other front object (specify): \_\_\_\_\_

### LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify): \_\_\_\_\_
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): \_\_\_\_\_

### RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests

- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): \_\_\_\_\_
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify): \_\_\_\_\_

### INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): \_\_\_\_\_
- (155) Head restraint system
- (160) Other occupants (specify): \_\_\_\_\_
- (161) Interior loose objects
- (162) Child safety seat (specify): \_\_\_\_\_
- (163) Other interior object (specify): \_\_\_\_\_

### AIR BAG

- (170) Air bag-driver side
- (171) Air bag-driver side and eyewear
- (172) Air bag-driver side and jewelry
- (173) Air bag-driver side and object held
- (174) Air bag-driver side and object in mouth
- (175) Air bag compartment cover-driver side
- (176) Air bag compartment cover-driver side and eyewear
- (177) Air bag compartment cover-driver side and jewelry
- (178) Air bag compartment cover-driver side and object held
- (179) Air bag compartment cover-driver side and object in mouth
- (180) Air bag-passenger side
- (181) Air bag-passenger side and eyewear
- (182) Air bag-passenger side and jewelry

- (183) Air bag-passenger side and object held
- (184) Air bag-passenger side and object in mouth
- (185) Air bag compartment cover-passenger side
- (186) Air bag compartment cover-passenger side and eyewear
- (187) Air bag compartment cover-passenger side and jewelry
- (188) Air bag compartment cover-passenger side and object held
- (189) Air bag compartment cover-passenger side and object in mouth
- (190) Other air bag (specify) \_\_\_\_\_
- (195) Other air bag compartment cover (specify) \_\_\_\_\_

### ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top

### FLOOR

- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

### REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): \_\_\_\_\_

### ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts, (specify): \_\_\_\_\_
- (409) Additional or relocated switches, (specify): \_\_\_\_\_

- (410) Raised roof

- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify): \_\_\_\_\_

### EXTERIOR of OCCUPANT'S VEHICLE

- (451) Hood
- (452) Outside hardware (e.g., outside mirror, antenna)
- (453) Other exterior surface or tires (specify): \_\_\_\_\_
- (454) Unknown exterior objects

### EXTERIOR OF OTHER MOTOR VEHICLE

- (501) Front bumper
- (502) Hood edge
- (503) Other front of vehicle (specify): \_\_\_\_\_
- (504) Hood
- (505) Hood ornament
- (506) Windshield, roof rail, A-pillar
- (507) Side surface
- (508) Side mirrors
- (509) Other side protrusions (specify): \_\_\_\_\_
- (510) Rear surface
- (511) Undercarriage
- (512) Tires and wheels
- (513) Other exterior of other motor vehicle (specify): \_\_\_\_\_
- (514) Unknown exterior of other motor vehicle

### OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

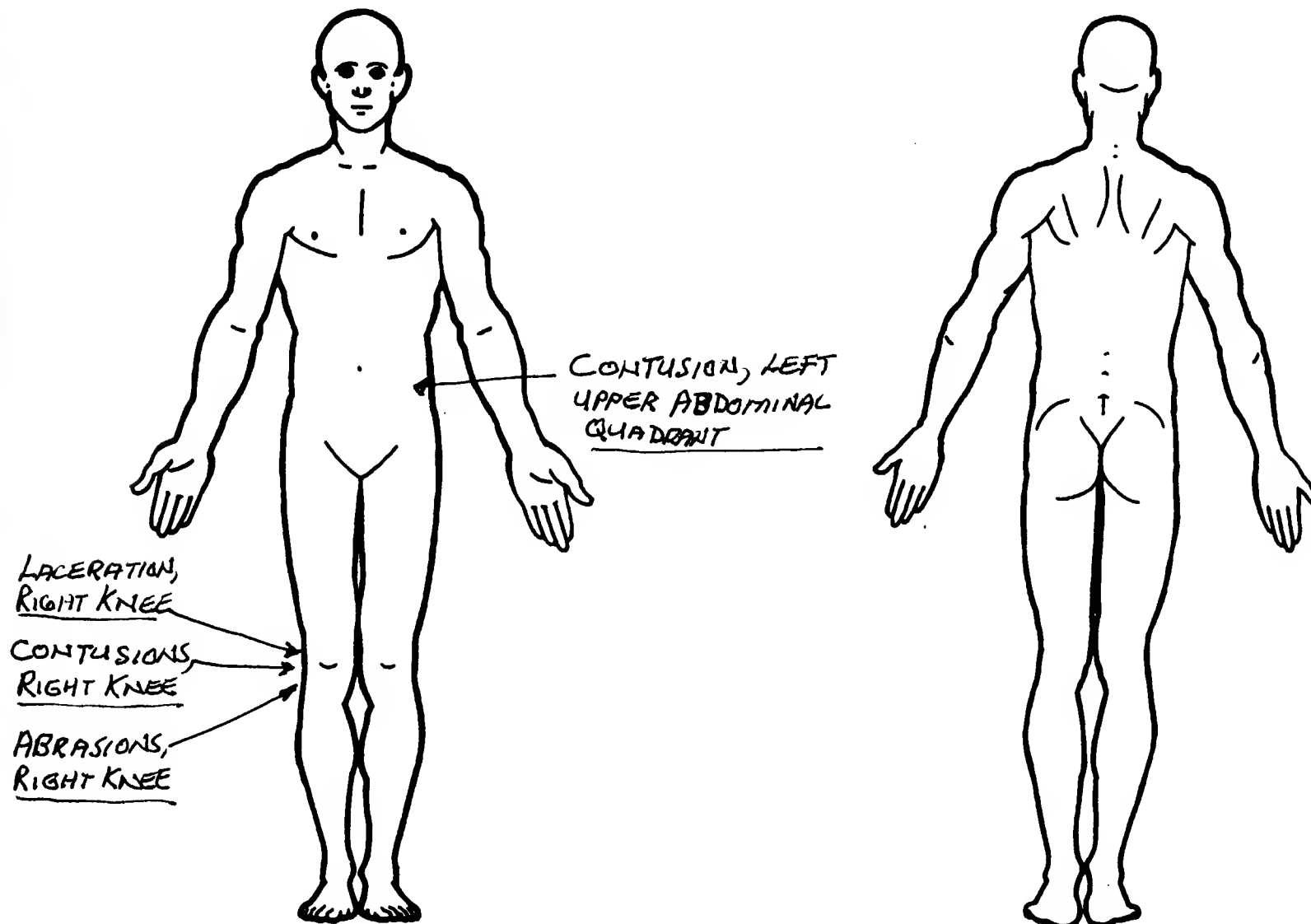
- (551) Ground
- (598) Other vehicle or object (specify): \_\_\_\_\_
- (599) Unknown vehicle or object

### NONCONTACT INJURY

- (601) Fire in vehicle
- (602) Flying glass
- (603) Other noncontact injury source (specify): \_\_\_\_\_
- (604) Air bag exhaust gases
- (697) Injured, unknown source

## OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



# OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

\_\_\_ No

\_\_\_ Yes

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

Blood Alcohol Level  
(mg/dl)

BAL = \_\_\_

Glasgow Coma  
Scale Score

GCSS = \_\_\_

Units of Blood  
Given

Units = \_\_\_

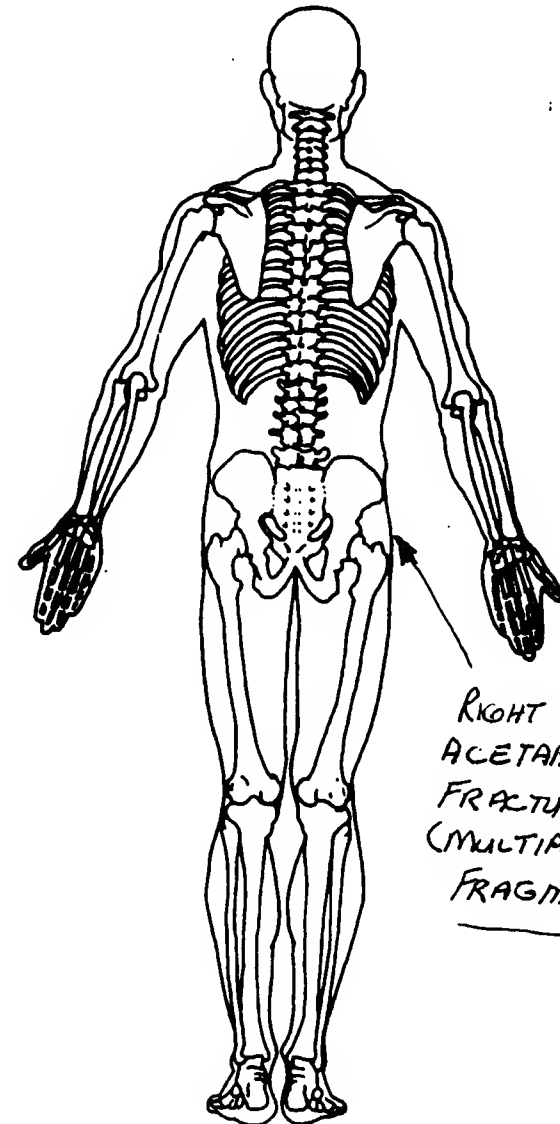
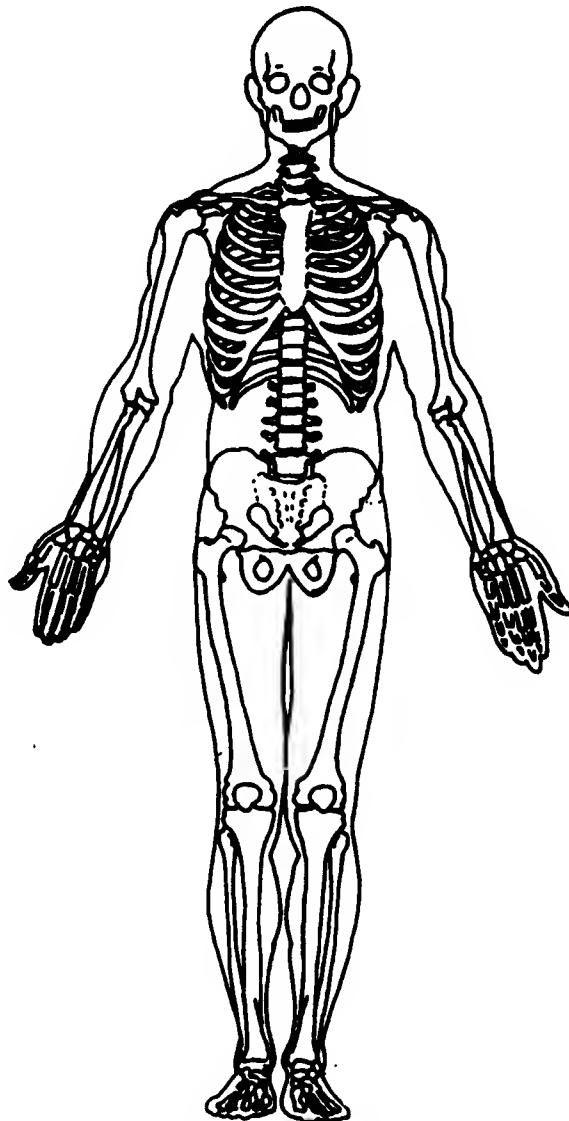
Arterial Blood Gases

pH = \_\_\_

PO<sub>2</sub> = \_\_\_

PCO<sub>2</sub> \_\_\_

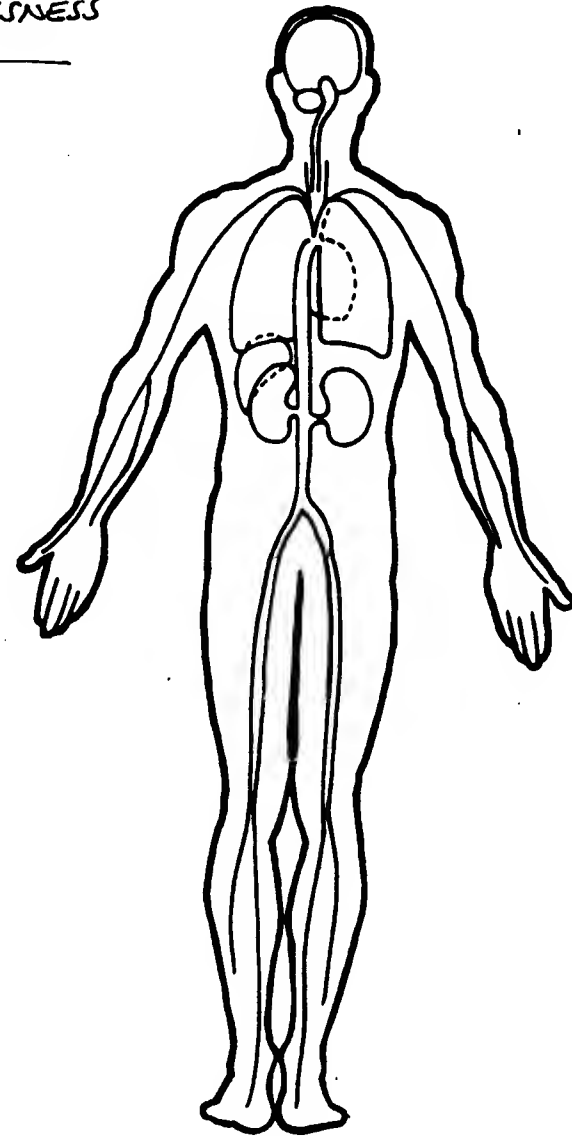
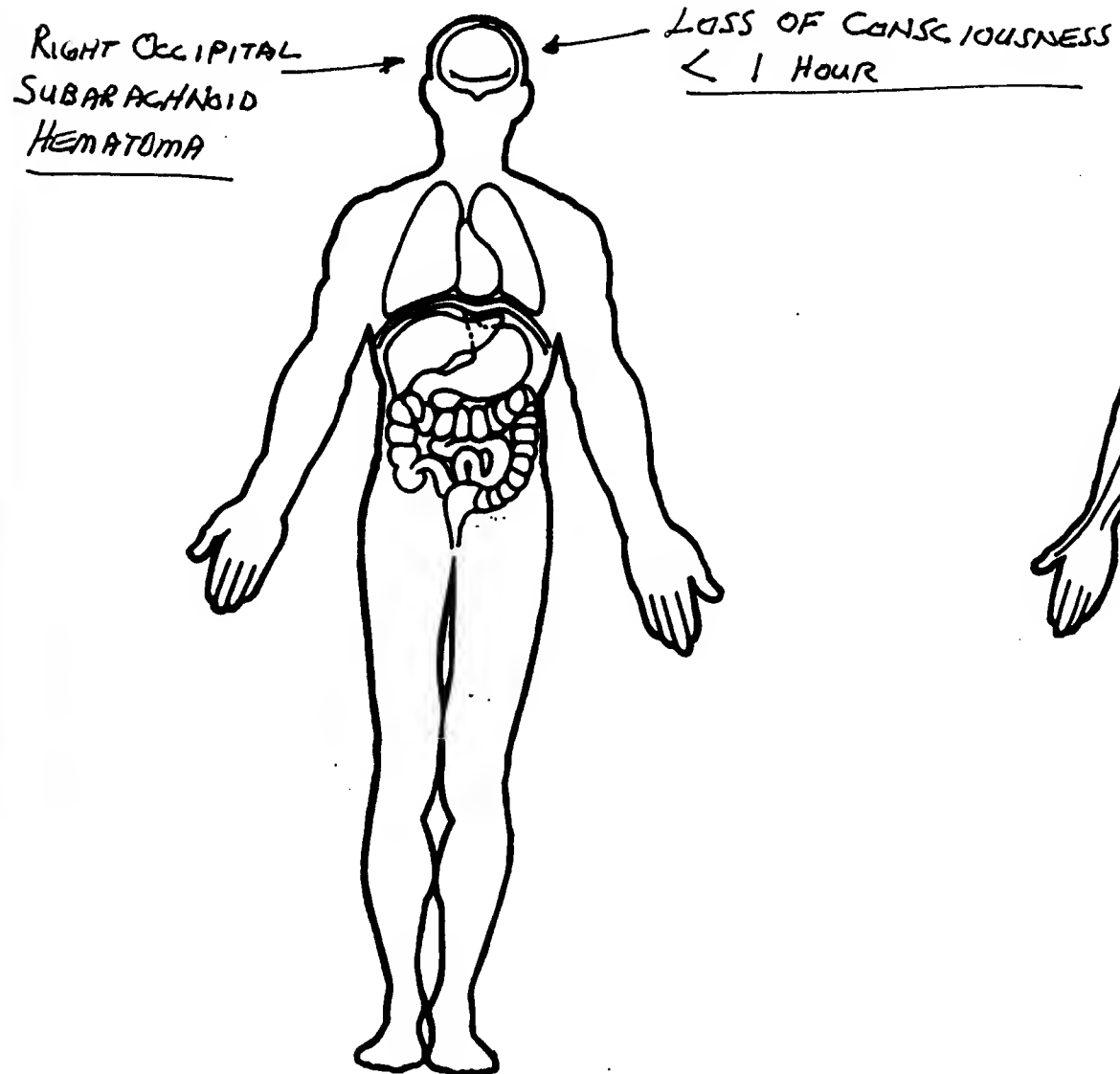
HCO<sub>3</sub> \_\_\_



RIGHT POSTERIOR  
ACETABULAR COLUMN  
FRACTURE  
(MULTIPLE BONE  
FRAGMENTS)

## OFFICIAL INJURY DATA —INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





# CRASHPC PROGRAM SUMMARY

(All Measurements in Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

Identifying Title	DSI-95-SP-013	01	
Primary Sampling Unit	Case No.-Stratum	Accident Event Sequence No.	Date (Month, day, year) of Run

## CRASHPC Vehicle Identification

Vehicle 1	1983	DODGE	VAN	
Vehicle 2	1991	TOYOTA	CELICA	GTS
	Year	Make	Model	NASS Veh. No.

## GENERAL INFORMATION

VEHICLE 1		VEHICLE 2	
Size	1	Size	2
Weight		Weight	
1575 + 403 + 0 = 1978 kg		1277 + 72 + 0 = 1349 kg	
Curb Occupant(s) Cargo		Curb Occupant(s) Cargo	
CDC	72 FDEW7	CDC	72 FDEW4
PDOF (-180 to +180)	010	PDOF (-180 to +180)	010
Stiffness	7	Stiffness	2

## SCENE INFORMATION

Rest and Impact Positions [ ] No, Go To Damage Information [ ] Yes

VEHICLE 1		VEHICLE 2	
Rest Position	X _____ m Y _____ m PSI _____ °	Rest Position	X _____ m Y _____ m PSI _____ °
Impact Position	X _____ m Y _____ m PSI _____ °	Impact Position	X _____ m Y _____ m PSI _____ °
Slip Angle(-180 to +180)	_____ °	Slip Angle (-180 to +180)	_____ °

## VEHICLE MOTION

Sustained Contact [ ] No [ ] Yes

VEHICLE 1		VEHICLE 2	
Vehicle Rotation	[ ] No [ ] Yes	Vehicle Rotation	[ ] No [ ] Yes
Rotation Stop Before Rest	[ ] No [ ] Yes	Rotation Stop Before Rest	[ ] No [ ] Yes
End of Rotation Position	X _____ m Y _____ m PSI _____ °	End of Rotation Position	X _____ m Y _____ m PSI _____ °
Curved Path	[ ] No [ ] Yes	Curved Path	[ ] No [ ] Yes
Point on Path	X _____ m Y _____ m	Point on Path	X _____ m Y _____ m
Rotation Direction	[ ] None [ ] CW [ ] CCW	Rotation Direction	[ ] None [ ] CW [ ] CCW
Rotation >360°	[ ] No [ ] Yes	Rotation >360°	[ ] No [ ] Yes



## FRICTION INFORMATION

Coefficient of Friction \_\_\_\_\_

Rolling Resistance Option \_\_\_\_\_

## Vehicle 1 Rolling Resistance

LF \_\_\_\_\_ RF \_\_\_\_\_

LR \_\_\_\_\_ RR \_\_\_\_\_

## Vehicle 2 Rolling Resistance

LF \_\_\_\_\_ RF \_\_\_\_\_

LR \_\_\_\_\_ RR \_\_\_\_\_

## TRAJECTORY INFORMATION

Trajectory Data ☐ No ☐ Yes

If No, Go To Damage Information

## Vehicle 1 Steer Angles

LF \_\_\_\_\_ ° RF \_\_\_\_\_ °

LR \_\_\_\_\_ ° RR \_\_\_\_\_ °

## Vehicle 2 Steer Angles

LF \_\_\_\_\_ ° RF \_\_\_\_\_ °

LR \_\_\_\_\_ ° RR \_\_\_\_\_ °

Terrain Boundary ☐ No ☐ Yes

## First Point

X \_\_\_\_\_ m Y \_\_\_\_\_ m

## Second Point

X \_\_\_\_\_ m Y \_\_\_\_\_ m

Secondary Coefficient of Friction \_\_\_\_\_

## DAMAGE INFORMATION

## VEHICLE 1

Damage Length L 107 cmCrush Depths C<sub>1</sub> 000 cmC<sub>2</sub> 005 cmC<sub>3</sub> 022 cmC<sub>4</sub> 085 cmC<sub>5</sub> 097 cmC<sub>6</sub> 123 cmDamage Offset D 0024 cm

## VEHICLE 2

Damage Length L 140 cmCrush Depths C<sub>1</sub> 040 cmC<sub>2</sub> 082 cmC<sub>3</sub> 081 cmC<sub>4</sub> 095 cmC<sub>5</sub> 102 cmC<sub>6</sub> 106 cmDamage Offset D 000 cm

FOR EACH VEHICLE INVOLVED IN THE CRASH, IF A VEHICLE WAS IN TRANSPORT, FILL IN THE INFORMATION BELOW

Model Year: \_\_\_\_\_

Make: \_\_\_\_\_

Model: \_\_\_\_\_

VIN: \_\_\_\_\_

The Weight, CDC, Scene Data and Damage Information for this vehicle should be recorded above.

Complete and ATTACH the appropriate vehicle damage sketch and dimensions to the Form.

# SUMMARY OF CRASHPC RESULTS (USING SPINOUT)

DSI-95-SP-013

SPEED CHANGE (DAMAGE)	VEH #1	TOTAL (KPH)	LONG. (KPH)	LAT. (KPH)	ANG. (DEG)
	VEH #1	59.7	-58.8	-10.4	10.0
	VEH #2	87.9	-86.6	-15.3	10.0

ENERGY DISSIPATED BY DAMAGE VEH#1:474621.4 JOULES VEH#2:228616.2 JOULES

## SUMMARY OF DAMAGE DATA VEHICLE # 1

(\* INDICATES DEFAULT VALUE)  
VEHICLE # 2

TYPE-----CATEGORY 7  
STIFFNESS---CATEGORY 7  
WEIGHT----- 1978.0 KGS  
CDC-----12FDEW7  
L----- 187.0 CM.  
C1----- .0 CM.  
C2----- 5.0 CM.  
C3----- 22.0 CM.  
C4----- 85.0 CM.  
C5----- 97.0 CM.  
C6----- 123.0 CM.  
D----- 24.0 CM.  
RHO----- 1.00 \*  
ANG----- 10.0 DEG.  
D'----- 65.9 CM.

TYPE-----CATEGORY 2  
STIFFNESS---CATEGORY 2  
WEIGHT----- 1344.0 KGS  
CDC-----12FDEW4  
L----- 140.0 CM.  
C1----- 40.0 CM.  
C2----- 82.0 CM.  
C3----- 81.0 CM.  
C4----- 95.0 CM.  
C5----- 102.0 CM.  
C6----- 106.0 CM.  
D----- .0 CM.  
RHO----- 1.00 \*  
ANG----- 10.0 DEG.  
D'----- 7.0 CM.

## DIMENSIONS AND INERTIAL PROPERTIES

A1 = 123.2 CM.  
B1 = 174.0 CM.  
TR1 = 171.7 CM.  
I1 = 475628.0 NEWT-SEC\*\*2-CM  
M1 = 19.855 NEWT-SEC\*\*2/CM  
XF1 = 192.0 CM.  
XR1 = -271.8 CM.  
YS1 = 100.3 CM.

A2 = 117.6 CM.  
B2 = 127.3 CM.  
TR2 = 138.7 CM.  
I2 = 256853.0 NEWT-SEC\*\*2-CM  
M2 = 13.491 NEWT-SEC\*\*2/CM  
XF2 = 211.6 CM.  
XR2 = -232.7 CM.  
YS2 = 85.3 CM.

# SUMMARY OF CRASHPC RESULTS (USING SPINOUT)

DSI-95-SP-013

SPEED CHANGE (DAMAGE)	VEH #1	TOTAL (MPH)	LONG. (MPH)	LAT. (MPH)	ANG. (DEG)
	VEH #1	37.1	-36.5	-6.4	10.0
	VEH #2	54.6	-53.8	-9.5	10.0

ENERGY DISSIPATED BY DAMAGE VEH#1:350015.8 FT-LB. VEH#2:168596.0 FT-LB.

## SUMMARY OF DAMAGE DATA VEHICLE # 1

(\* INDICATES DEFAULT VALUE)  
VEHICLE # 2

TYPE-----CATEGORY 7  
STIFFNESS---CATEGORY 7  
WEIGHT----- 4360.7 LBS.  
CDC-----12FDEW7  
L----- 73.6 IN.  
C1----- .0 IN.  
C2----- 2.0 IN.  
C3----- 8.7 IN.  
C4----- 33.5 IN.  
C5----- 38.2 IN.  
C6----- 48.4 IN.  
D----- 9.4 IN.  
RHO----- 1.00 \*  
ANG----- 10.0 DEG.  
D'----- 25.9 IN.

TYPE-----CATEGORY 2  
STIFFNESS---CATEGORY 2  
WEIGHT----- 2963.0 LBS.  
CDC-----12FDEW4  
L----- 55.1 IN.  
C1----- 15.7 IN.  
C2----- 32.3 IN.  
C3----- 31.9 IN.  
C4----- 37.4 IN.  
C5----- 40.2 IN.  
C6----- 41.7 IN.  
D----- .0 IN.  
RHO----- 1.00 \*  
ANG----- 10.0 DEG.  
D'----- 2.8 IN.

## DIMENSIONS AND INERTIAL PROPERTIES

A1 = 48.5 IN.  
B1 = 68.5 IN.  
TR1 = 67.6 IN.  
I1 = 42098.7 LB-SEC\*\*2-IN  
M1 = 11.338 LB-SEC\*\*2/IN  
XF1 = 75.6 IN.  
XR1 = -107.0 IN.  
YS1 = 39.5 IN.

A2 = 46.3 IN.  
B2 = 50.1 IN.  
TR2 = 54.6 IN.  
I2 = 22734.5 LB-SEC\*\*2-IN  
M2 = 7.704 LB-SEC\*\*2/IN  
XF2 = 83.3 IN.  
XR2 = -91.6 IN.  
YS2 = 33.6 IN.

# SUMMARY OF CRASHPC RESULTS (USING SPINOUT)

SP-13 Vehicle 1 ebs

SPEED CHANGE (DAMAGE)	VEH #1	TOTAL (KPH)	LONG. (KPH)	LAT. (KPH)	ANG. (DEG)
	VEH #1	76.2	-75.1	-13.2	10.0
	VEH #2	.0	.0	.0	.0

ENERGY DISSIPATED BY DAMAGE VEH#1:474621.4 JOULES VEH#2: .0 JOULES

## SUMMARY OF DAMAGE DATA VEHICLE # 1

(\* INDICATES DEFAULT VALUE)  
VEHICLE # 2

TYPE-----CATEGORY 7  
STIFFNESS---CATEGORY 7  
WEIGHT----- 1978.0 KGS  
CDC-----12FDEW7  
L----- 187.0 CM.  
C1----- .0 CM.  
C2----- 5.0 CM.  
C3----- 22.0 CM.  
C4----- 85.0 CM.  
C5----- 97.0 CM.  
C6----- 123.0 CM.  
D----- 24.0 CM.  
RHO----- 1.00 \*  
ANG----- 10.0 DEG.  
D'----- 65.9 CM.

TYPE-----CATEGORY 11  
STIFFNESS---CATEGORY 0  
WEIGHT----- 999999.9 KGS \*  
CDC-----BARRIER  
L----- .0 CM. \*  
C1----- .0 CM. \*  
C2----- .0 CM. \*  
C3----- .0 CM. \*  
C4----- .0 CM. \*  
C5----- .0 CM. \*  
C6----- .0 CM. \*  
D----- .0 CM. \*  
RHO----- 1.00 \*  
ANG----- .0 DEG. \*  
D'----- 65.9 CM.

## DIMENSIONS AND INERTIAL PROPERTIES

A1 = 123.2 CM.  
B1 = 174.0 CM.  
TR1 = 171.7 CM.  
I1 = 475628.0 NEWT-SEC\*\*2-CM  
M1 = 19.855 NEWT-SEC\*\*2/CM  
XF1 = 192.0 CM.  
XR1 = -271.8 CM.  
YS1 = 100.3 CM.

A2 = 127.0 CM.  
B2 = 127.0 CM.  
TR2 = 127.0 CM.  
I2 = \*\*\*\*\* NEWT-SEC\*\*2-CM  
M2 = \*\*\*\*\* NEWT-SEC\*\*2/CM  
XF2 = 127.0 CM.  
XR2 = -127.0 CM.  
YS2 = 127.0 CM.

# SUMMARY OF CRASHPC RESULTS (USING SPINOUT)

SP-13 Vehicle 1 ebs

SPEED CHANGE (DAMAGE)	VEH #1	TOTAL (MPH)	LONG. (MPH)	LAT. (MPH)	ANG. (DEG)
	VEH #1	47.4	-46.6	-8.2	10.0
	VEH #2	.0	.0	.0	.0

ENERGY DISSIPATED BY DAMAGE VEH#1:350015.8 FT-LB. VEH#2: .0 FT-LB.

## SUMMARY OF DAMAGE DATA VEHICLE # 1

(\* INDICATES DEFAULT VALUE)  
VEHICLE # 2

TYPE-----CATEGORY 7  
STIFFNESS---CATEGORY 7  
WEIGHT----- 4360.7 LBS.  
CDC-----12FDEW7  
L----- 73.6 IN.  
C1----- .0 IN.  
C2----- 2.0 IN.  
C3----- 8.7 IN.  
C4----- 33.5 IN.  
C5----- 38.2 IN.  
C6----- 48.4 IN.  
D----- 9.4 IN.  
RHO----- 1.00 \*  
ANG----- 10.0 DEG.  
D'----- 25.9 IN.

TYPE-----CATEGORY 11  
STIFFNESS---CATEGORY 0  
WEIGHT-----2204586.0 LBS. \*  
CDC-----BARRIER  
L----- .0 IN. \*  
C1----- .0 IN. \*  
C2----- .0 IN. \*  
C3----- .0 IN. \*  
C4----- .0 IN. \*  
C5----- .0 IN. \*  
C6----- .0 IN. \*  
D----- .0 IN. \*  
RHO----- 1.00 \*  
ANG----- .0 DEG. \*  
D'----- 25.9 IN.

## DIMENSIONS AND INERTIAL PROPERTIES

A1 = 48.5 IN.  
B1 = 68.5 IN.  
TR1 = 67.6 IN.  
I1 = 42098.7 LB-SEC\*\*2-IN  
M1 = 11.338 LB-SEC\*\*2/IN  
XF1 = 75.6 IN.  
XR1 = -107.0 IN.  
YS1 = 39.5 IN.

A2 = 50.0 IN.  
B2 = 50.0 IN.  
TR2 = 50.0 IN.  
I2 = 5732151000.0 LB-SEC\*\*2-IN  
M2 = 5732.151 LB-SEC\*\*2/IN  
XF2 = 50.0 IN.  
XR2 = -50.0 IN.  
YS2 = 50.0 IN.



# SUMMARY OF CRASHPC RESULTS (USING SPINOUT)

SP-13 Vehicle 2 ebs

SPEED CHANGE		TOTAL (KPH)	LONG. (KPH)	LAT. (KPH)	ANG. (DEG)
(DAMAGE)	VEH #1	65.4	-64.4	-11.4	10.0
	VEH #2	.0	.0	.0	.0

ENERGY DISSIPATED BY DAMAGE VEH#1:228616.2 JOULES VEH#2: .0 JOULES

## SUMMARY OF DAMAGE DATA VEHICLE # 1

(\* INDICATES DEFAULT VALUE)  
VEHICLE # 2

TYPE-----CATEGORY 2  
STIFFNESS---CATEGORY 2  
WEIGHT----- 1344.0 KGS  
CDC-----12FDEW4  
L----- 140.0 CM.  
C1----- 40.0 CM.  
C2----- 82.0 CM.  
C3----- 81.0 CM.  
C4----- 95.0 CM.  
C5----- 102.0 CM.  
C6----- 106.0 CM.  
D----- .0 CM. \*  
RHO----- 1.00 \*  
ANG----- 10.0 DEG.  
D'----- 7.0 CM.

TYPE-----CATEGORY 11  
STIFFNESS---CATEGORY 0  
WEIGHT----- 999999.9 KGS \*  
CDC-----BARRIER  
L----- .0 CM. \*  
C1----- .0 CM. \*  
C2----- .0 CM. \*  
C3----- .0 CM. \*  
C4----- .0 CM. \*  
C5----- .0 CM. \*  
C6----- .0 CM. \*  
D----- .0 CM. \*  
RHO----- 1.00 \*  
ANG----- .0 DEG. \*  
D'----- 65.9 CM.

## DIMENSIONS AND INERTIAL PROPERTIES

A1 = 117.6 CM.  
B1 = 127.3 CM.  
TR1 = 138.7 CM.  
I1 = 256853.0 NEWT-SEC\*\*2-CM  
M1 = 13.491 NEWT-SEC\*\*2/CM  
XF1 = 211.6 CM.  
XR1 = -232.7 CM.  
YS1 = 85.3 CM.

A2 = 127.0 CM.  
B2 = 127.0 CM.  
TR2 = 127.0 CM.  
I2 =\*\*\*\*\* NEWT-SEC\*\*2-CM  
M2 =\*\*\*\*\* NEWT-SEC\*\*2/CM  
XF2 = 127.0 CM.  
XR2 = -127.0 CM.  
YS2 = 127.0 CM.

SUMMARY OF CRASHPC RESULTS (USING SPINOUT)

SP-13 Vehicle 2 ebs

SPEED CHANGE (DAMAGE)	VEH #1	TOTAL (MPH)	LONG. (MPH)	LAT. (MPH)	ANG. (DEG)
	VEH #1	40.6	-40.0	-7.1	10.0
	VEH #2	.0	.0	.0	.0

ENERGY DISSIPATED BY DAMAGE VEH#1:168596.0 FT-LB. VEH#2: .0 FT-LB.

SUMMARY OF DAMAGE DATA  
VEHICLE # 1

(\* INDICATES DEFAULT VALUE)  
VEHICLE # 2

TYPE-----CATEGORY 2  
STIFFNESS---CATEGORY 2  
WEIGHT----- 2963.0 LBS.  
CDC-----12FDEW4  
L----- 55.1 IN.  
C1----- 15.7 IN.  
C2----- 32.3 IN.  
C3----- 31.9 IN.  
C4----- 37.4 IN.  
C5----- 40.2 IN.  
C6----- 41.7 IN.  
D----- .0 IN. \*  
RHO----- 1.00 \*  
ANG----- 10.0 DEG.  
D'----- 2.8 IN.

TYPE-----CATEGORY 11  
STIFFNESS---CATEGORY 0  
WEIGHT-----2204586.0 LBS. \*  
CDC-----BARRIER  
L----- .0 IN. \*  
C1----- .0 IN. \*  
C2----- .0 IN. \*  
C3----- .0 IN. \*  
C4----- .0 IN. \*  
C5----- .0 IN. \*  
C6----- .0 IN. \*  
D----- .0 IN. \*  
RHO----- 1.00 \*  
ANG----- .0 DEG. \*  
D'----- 25.9 IN.

DIMENSIONS AND INERTIAL PROPERTIES

A1 = 46.3 IN.  
B1 = 50.1 IN.  
TR1 = 54.6 IN.  
I1 = 22734.5 LB-SEC\*\*2-IN  
M1 = 7.704 LB-SEC\*\*2/IN  
XF1 = 83.3 IN.  
XR1 = -91.6 IN.  
YS1 = 33.6 IN.

A2 = 50.0 IN.  
B2 = 50.0 IN.  
TR2 = 50.0 IN.  
I2 = 5732151000.0 LB-SEC\*\*2-IN  
M2 = 5732.151 LB-SEC\*\*2/IN  
XF2 = 50.0 IN.  
XR2 = -50.0 IN.  
YS2 = 50.0 IN.



## SMASH PROGRAM SUMMARY

(All Measurements in Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

## Identifying Title

Primary  
Sampling Unit

Case No.-Stratum

Accident Event  
Sequence No.

Date (Month, day, year) of Run

DSI-95-SP-013

01

1 1 196

## GENERAL INFORMATION

## VEHICLE 1

## VEHICLE 2

NASS Vehicle Number

NASS Vehicle Number

Year

Year

Make

Make

Model

Model

Body Style

Body Style

CDC

CDC

PDOF

PDOF

Heading Angle

Heading Angle

1983

1991

DODGE

TOYOTA

RAM VAN

CELICA

VN

3H

12 FDEW7

12 FDEW4

0010°

± \_\_\_\_\_°

± \_\_\_\_\_°

± \_\_\_\_\_°

## VEHICLE SPECIFICATIONS

## VEHICLE 1

## VEHICLE 2

Wheelbase

Wheelbase

Overall Length

Overall Length

Overall Width

Overall Width

Weight

Weight

1575 + 403 + 0 = 1978 kg

1272 + 720 + 0 = 1344 kg

Curb Occupant(s) Cargo

Curb Occupant(s) Cargo

Engine Displacement

Engine Displacement

Drive System

Drive System

Size

Size

Stiffness

Stiffness

324 cm

253 cm

500 cm

442 cm

203 cm

175 cm

5.2 L

2.2 L

RWD

FWD

7

2

7

2

## DAMAGE INFORMATION

## VEHICLE 1

## VEHICLE 2

Damage known?

Damage known?

Damage Length

Damage Length

Damage Offset

Damage Offset

Crush Depth:

Crush Depth:

187 Y cm

140 Y cm

0024 cm

± 000 cm

000 cm

040 cm

005 cm

082 cm

022 cm

081 cm

085 cm

095 cm

097 cm

102 cm

123 cm

106 cm

## SCENE INFORMATION

Rest and Impact Positions ☐ No ☐ Yes

VEHICLE 1			VEHICLE 2		
Rest	X	_____ . _____ m	Rest	X	_____ . _____ m
Position	Y	_____ . _____ m	Position	Y	_____ . _____ m
	PSI	_____ °		PSI	_____ °
Impact	X	_____ . _____ m	Impact	X	_____ . _____ m
Position	Y	_____ . _____ m	Position	Y	_____ . _____ m
	PSI	_____ °		PSI	_____ °
Slip Angle (-180 to +180)		_____ °	Slip Angle (-180 to +180)		_____ °

## VEHICLE MOTION

Sustained Contact ☐ No ☐ Yes

VEHICLE 1

Sustained Contact ☐ No ☐ Yes

VEHICLE 2

Vehicle Rotation ☐ No ☐ YesRotation Stop Before Rest ☐ No ☐ Yes

End of Rotation X \_\_\_\_\_ . \_\_\_\_\_ m

Position Y \_\_\_\_\_ . \_\_\_\_\_ m

PSI \_\_\_\_\_ °

Vehicle Rotation ☐ No ☐ YesRotation Stop Before Rest ☐ No ☐ Yes

End of Rotation X \_\_\_\_\_ . \_\_\_\_\_ m

Position Y \_\_\_\_\_ . \_\_\_\_\_ m

PSI \_\_\_\_\_ °

Curved Path ☐ No ☐ Yes

Point on Path

X \_\_\_\_\_ . \_\_\_\_\_ m Y \_\_\_\_\_ . \_\_\_\_\_ m

Curved Path ☐ No ☐ Yes

Point on Path

X \_\_\_\_\_ . \_\_\_\_\_ m Y \_\_\_\_\_ . \_\_\_\_\_ m

Rotation Direction ☐ None ☐ CW ☐ CCWRotation >360° ☐ No ☐ YesRotation Direction ☐ None ☐ CW ☐ CCWRotation >360° ☐ No ☐ Yes

## FRICTION INFORMATION

Coefficient of Friction \_\_\_\_\_

Rolling Resistance Option \_\_\_\_\_

Vehicle 1 Rolling Resistance

LF \_\_\_\_\_ RF \_\_\_\_\_

LR \_\_\_\_\_ RR \_\_\_\_\_

Vehicle 2 Rolling Resistance

LF \_\_\_\_\_ RF \_\_\_\_\_

LR \_\_\_\_\_ RR \_\_\_\_\_

IF THIS COLLISION INVOLVED A TRUCK OR BUS (VEHICLE NOT IN TRANSPORT), FILL IN THE INFORMATION BELOW.

Model Year: \_\_\_\_\_

Make: \_\_\_\_\_

Model: \_\_\_\_\_

VIN: \_\_\_\_\_

The Weight, CDC, Scene Data and Damage Information for this vehicle should be recorded above.

**Complete and ATTACH the appropriate**  
**damage sketch and dimensions to the form.**